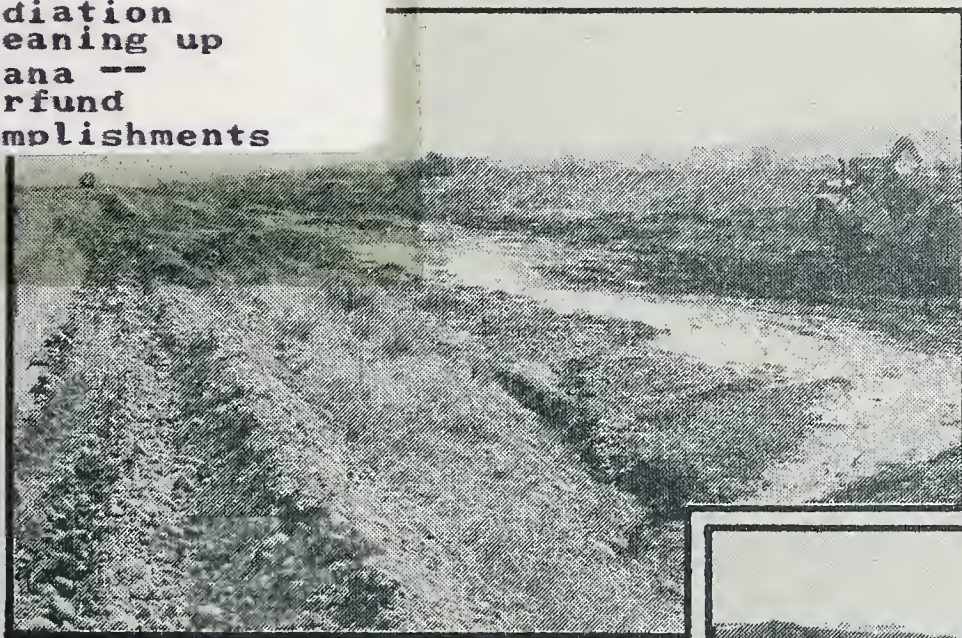


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Montana
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Cleaning up
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Superfund
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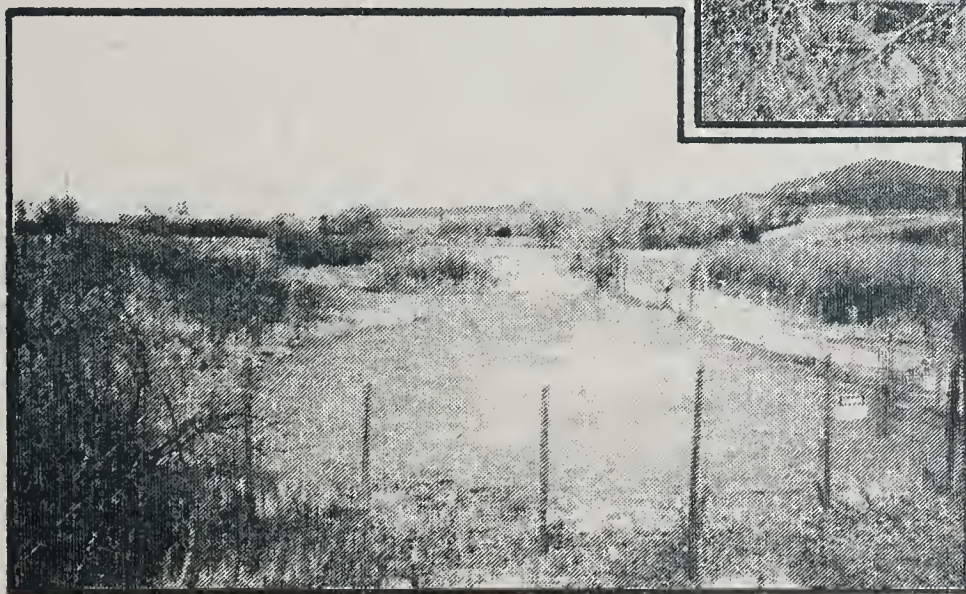
Cleaning up Montana --



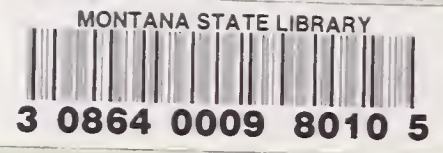
Superfund Accomplishments

1983 -1996

By the Montana Department of
Environmental Quality,
Environmental Remediation Division

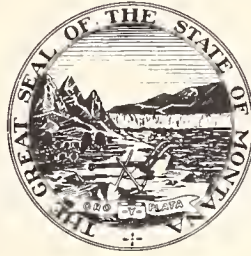


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MARC RACICOT
GOVERNOR

STATE CAPITOL
HELENA, MONTANA 59620-0801

May 1996

An open letter to the citizens of Montana:

Montana is a special corner of God's good earth--148,000 square miles of mountains and prairies, forests and farms, rivers and streams and wild areas that we are committed to preserving, protecting--and cleaning up.

Unfortunately, the unregulated disposal of wastes from mines, smelters, refineries, railroad facilities, wood-treating plants and other operations of years past resulted in contamination problems we will confront for years to come. These problems include the contamination of valuable environmental resources such as stream systems, fisheries, and groundwater, and threats to public health such as exposure to contaminated drinking water.

In the past 13 years, the Montana Department of Health and Environmental Sciences, and now the Montana Department of Environmental Quality, has made definite progress in addressing the contamination problems in our state so that contaminated land and water can be returned to beneficial uses. The Montana Superfund program has a solid history of timely achievements, including major cleanup actions at the Silver Bow Creek and Anaconda federal Superfund sites. Final cleanup actions are underway at seven of the eight federal Superfund sites in Montana and an interim cleanup has been completed at the eighth site.

Final cleanup has been completed at 35 state Superfund sites. Interim cleanups have been completed at 74 sites, and 18 sites are undergoing final cleanup this year. This booklet summarizes the achievements of the Superfund program in Montana and gives an overview of how we are addressing the cleanup of hazardous substances in our state.

Montanans have always valued the right to a clean and healthful environment, which is guaranteed by our Constitution. As the temporary steward of this office, I am dedicated to the health and welfare of our citizens and our state. Laws against degrading the environment must be enforced to the same degree as all other laws. I hope all Montanans will share our concern and work together to remedy these problems as we move forward into a cleaner, healthier 21st Century.

Sincerely,

A handwritten signature in black ink, appearing to read "Marc Racicot".

MARC RACICOT
Governor



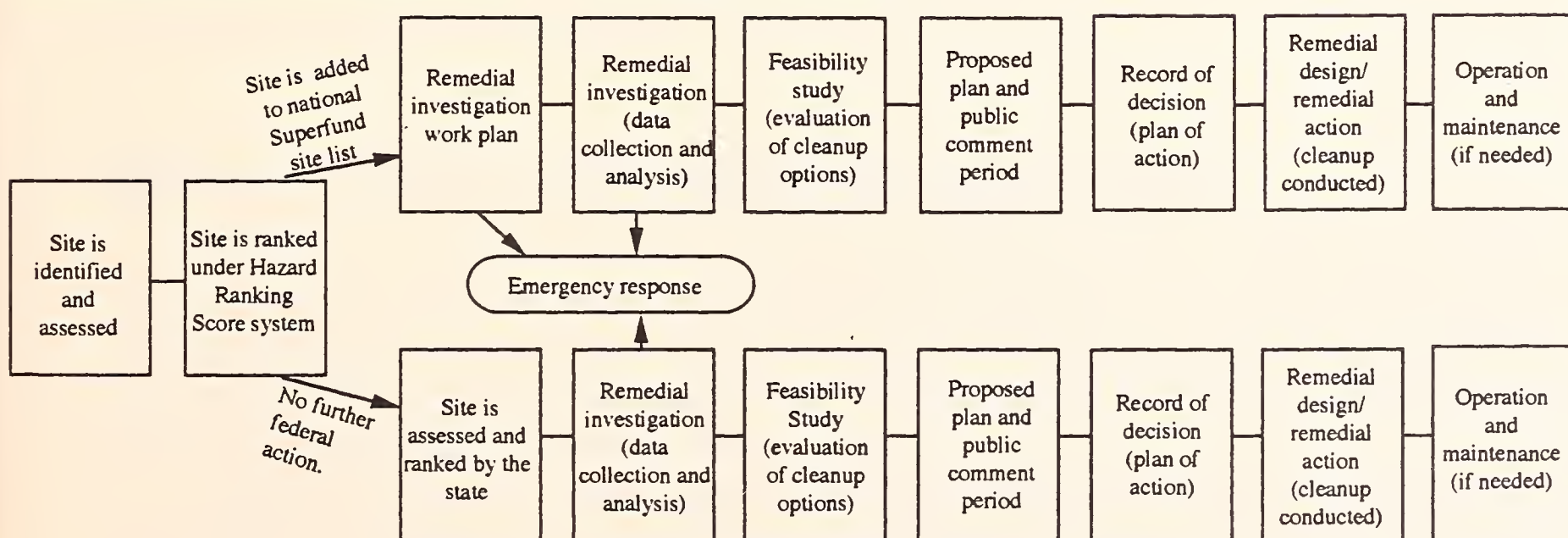
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TABLE OF CONTENTS

Superfund Overview	1
Accomplishments	9
Federal Sites Summary	25
CECRA (state) Sites Summary	38
Locations of Montana's Federal Sites	88
Locations of CECRA (non-NPL) Priority Sites List	89
Document Repositories	96
Mailing List Form	97

Federal and State Superfund Process



INTRODUCTION

Among the issues at the forefront of environmental concern is the cleanup of hazardous substances. The Superfund program is responsible for investigation and cleanup of unregulated hazardous substances -- a bigger job in Montana than you might imagine.

WHAT IS SUPERFUND?

Congress created the federal Superfund program in 1980 under the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA) to address the nation's most contaminated sites. In 1989, the Montana Legislature passed the Comprehensive Environmental Cleanup and Responsibility Act (CECRA) for the investigation and cleanup of those sites not being addressed by the federal Superfund law.

WHAT ARE MONTANA'S SUPERFUND SITES?

The federal and state Superfund laws apply to sites where a release or a threatened release of a hazardous substance exists. In Montana, the majority of these releases have occurred at sites where mining, smelting, wood-treating, railroad fueling and maintenance, petroleum refining, landfilling, and chemical manufacturing/storage activities were conducted. Historic waste disposal activities at these sites caused contamination of air, surface water, groundwater, sediments, and/or soils with hazardous substances. This contamination has caused, or may cause, public health impacts such as contaminated drinking water and ecological impacts such as loss of fisheries. Beginning on page 25 are summaries of the sites in Montana.

WHO CONDUCTS SUPERFUND ACTIVITIES?

The Montana Department of Environmental Quality (DEQ) was created in July 1995 and comprises programs from the former departments of Health and Environmental Sciences (DHES), State Lands, and Natural Resources and Conservation. All Superfund activities conducted before July 1995 were under the auspices of DHES. For this publication, all activities of DHES are credited to DEQ.

DEQ works closely with the United States Environmental Protection Agency (EPA) at federal Superfund sites. At each federal Superfund site, either EPA or DEQ has the "lead" or primary responsibility for site activities and decisions. The 279 state sites in Montana are addressed under CECRA and are referred to in this publication as "CECRA sites." DEQ has responsibility for investigation and cleanup at CECRA sites.

The DEQ Superfund Section's professional staff has knowledge and skills in diverse fields including environmental engineering, hydrogeology, environmental law, chemistry, biology, soil science, risk assessment, data management and public relations. DEQ's Superfund staff currently consists of 2.5 managerial positions, 13 scientists/engineers, 4 attorneys, 2 data management specialists and 5.5 support employees.

A CECRA cleanup may be conducted by DEQ or by the parties responsible for the contamination, either voluntarily or under an enforceable legal agreement with the state. If the government cleans up the site, it may require the responsible parties to pay the actual investigation and cleanup costs, plus penalties of up to two times the state's costs. If the responsible parties conduct the investigation and cleanup, DEQ closely oversees and directs the entire process, and the responsible parties pay for DEQ oversight costs. Cleanups at all federal CERCLA sites in Montana are being conducted by responsible parties under enforceable legal agreements with either EPA or DEQ.

Typically, the CECRA program does not address a site until it has been evaluated under the federal Superfund process and found ineligible for the list of federal Superfund sites (the National Priorities List, or "NPL"). In addition to sites not eligible for the federal list, the CECRA program addresses sites not qualifying under the federal Superfund program because of an exclusion or other factors. Some asbestos and petroleum sites fall into this category. CECRA also addresses sites which may be in the process of federal Superfund designation but need immediate action such as the Bitterroot Valley Sanitary Landfill and Burlington Northern/Livingston. Finally, CECRA addresses some sites without going through the CERCLA site evaluation process when the site or its impact is obviously too small to qualify it for the NPL.

WHO PAYS FOR SUPERFUND?

The federal Superfund law taxes the chemical and petroleum industries and the money in this tax fund is referred to as the "Superfund." All federal sites are eligible for federal funding. Responsible parties, however, are generally required to perform and pay for cleanup. DEQ enters into cooperative agreements with EPA for federal funds to address federal Superfund sites and to assess sites for possible federal listing. These funds are primarily used to oversee and direct the cleanup work of responsible parties. EPA then recovers both EPA and DEQ oversight costs from the responsible parties for the sites. Recovered costs are placed back into the Superfund to be used at other sites.

The state is authorized to spend state money to clean up state (CECRA) sites only after determining no responsible parties are able or willing to fund investigation and cleanup. In 1985, the Montana Legislature established the Environmental Quality Protection Fund (EQPF). The EQPF is a revolving fund in which all penalties, damages and costs recovered

under CECRA are deposited. The EQPF can be used only to fund activities relating to the release of a hazardous substance. The 1987 Legislature passed a bill which appropriated 4 percent (raised to 6 percent in 1994) of the Resource Indemnity Trust interest money beginning in July 1989 for DEQ activities at CECRA sites.

HOW DOES THE SUPERFUND PROCESS WORK?

Investigation of a Superfund site is complex, thorough and detailed. This is because a hazardous substance can have significant actual and potential effects on public health and the environment and cleanups can be costly. A Superfund investigation must also be legally defensible if the parties responsible for paying cleanup costs or others decide to challenge the DEQ findings in court.

The following is a brief description of the steps in the Superfund process. These steps apply to federal and CECRA (state) sites not undergoing voluntary cleanup. (Please see the flow chart at the beginning of this book.)

1. Preliminary assessment -

DEQ or EPA conducts a preliminary assessment by reviewing all available information about a site to determine if a release of hazardous substances has occurred or may occur. If the preliminary assessment reveals a serious, immediate threat to public health and/or the environment, DEQ or EPA may conduct an emergency response action. (Emergency response actions may be conducted during any step in the Superfund process if a particular threat is identified.)

2. Site inspection -

DEQ or EPA staff or their technical contractors visit the site to conduct field sampling and record more detailed information about the site, including terrain, land use, contaminants of concern and potentially affected populations.

3. Site ranking -

For sites that have the potential to be federal Superfund sites, the site is scored using EPA's hazard ranking system, based on information from the preliminary assessment and site inspection. Scores range from zero to 100. Sites achieving a score of 28.5 or higher are eligible to be placed on the federal list of Superfund sites (NPL) and may be eligible for federal Superfund money. Sites scoring below 28.5 are turned over to the CECRA program if further investigation and cleanup is deemed

necessary. DEQ then ranks the CECRA sites as maximum, high, medium or low priority, depending upon their potential impact on public health and the environment.

4. Remedial investigation -

The remedial investigation takes a more detailed look at all aspects of site contamination including the source(s), type(s), quantity and severity of contamination, and closely assesses the actual and potential effects on people and/or the environment. The remedial investigation generally takes between 18 and 24 months to complete for large sites, and less time for smaller sites.

During this time, many samples of water, soils, sediments, plants, animals and air may be collected and analyzed. Information gathered during the remedial investigation fully describes contamination at the site so appropriate cleanup plans can be developed.

A risk assessment may be part of the remedial investigation. DEQ uses risk assessments to determine the level of danger to public health and/or the environment posed by a particular site. Furthermore, the risk assessment determines the degree to which the site should be cleaned up in order to reduce the risk to an acceptable level.

5. Feasibility study -

The feasibility study evaluates cleanup alternatives that will reduce or eliminate the threat to public health and/or the environment. The alternatives are assessed based on the following criteria:

- overall protection of public health and the environment
- compliance with federal and state laws
- short- and long-term effectiveness
- reduction of toxicity, mobility and volume of contaminants through treatment
- implementability
- cost-effectiveness
- state agency acceptance (if EPA is the lead agency for the site)
- community and local government acceptance

Whenever possible, a remedy is selected which permanently reduces or eliminates the contamination. A preferred remedy based on the criteria listed above, along with the other alternatives considered, is presented to the public in a proposed plan. DEQ solicits public comment for at least 30 days before making a final determination.

6. Record of decision -

The record of decision is the legal document specifying the chosen cleanup alternative. It includes a "responsiveness summary" which details all public comments received on the cleanup alternatives as well as how DEQ or EPA considered those comments in selecting the final cleanup approach.

7. Remedial design/remedial action -

The remedial design is the engineering plan for the cleanup. The remedial action is the cleanup itself.

8. Operation and maintenance -

Operation and maintenance includes the on-going operation and maintenance of the site after implementation of the selected cleanup. In cases where the cleanup plan involves leaving hazardous substances on-site, the sites must be evaluated every five years to determine if the cleanup plan is working as it was designed.

Not all sites require operation and maintenance. Smaller sites, including many CECRA sites, can often be cleaned up in a manner and time frame such that long-term operation and maintenance is not needed.

Under CECRA, a site is addressed similarly to federal sites. (Please refer to the Superfund process chart at the beginning of this book.) Sites are ranked based on potential risks to public health and/or the environment. Because staff and financial resources are not sufficient to address the 279 sites in Montana, CECRA activities focus primarily on maximum and high priority sites.

Typically, DEQ first works with the responsible parties to obtain their cooperation in investigating and cleaning up the site. Most site cleanups are conducted by responsible parties working closely with DEQ. If the responsible parties are uncooperative, DEQ may initiate enforcement actions to obtain cleanup. Under provisions of CECRA, all state costs may be recovered from the responsible parties. If DEQ cannot find viable responsible parties to pay for investigation and cleanup, it may seek alternative funding from sources such as state-funded grants programs.

WHAT IS MONTANA'S VOLUNTARY CLEANUP PROGRAM?

The 1995 Montana Legislature passed a bill adding the Voluntary Cleanup and Redevelopment Act to CECRA law. This act streamlines and formalizes the process under which entities conduct voluntary cleanup of releases or threatened releases of hazardous substances. The act specifies voluntary cleanup plan requirements; agency review and approval criteria and time frames; public review requirements; and conditions for DEQ determinations that sites have been successfully cleaned up. Once DEQ has made such a determination, DEQ will issue a letter stating that no further cleanup action is necessary at the site.

HOW ARE CLEANUP DECISIONS MADE?

The purpose of the Superfund program is to reduce or eliminate the negative effects of a hazardous substance on public health and the environment. Determining the cleanup requirements for a particular site is crucial to the successful design of remedial measures.

Remedies implemented at Superfund sites must protect public health and the environment and must comply with applicable and relevant environmental laws, regulations, and standards. When cleanup standards are not otherwise available in existing environmental laws and regulations, a risk assessment may be conducted to determine cleanup levels based on current and reasonably anticipated future uses of a site. Factors considered in identifying applicable and relevant laws and regulations and in assessing risk include contaminant levels, site location and potential impacts from remedial activities. Remedies that meet these “threshold” criteria for protectiveness and compliance with applicable laws and regulations are then evaluated in a feasibility study using the criteria specified on page 4. DEQ selects the remedies that best meet this mix of criteria. Public input about the investigation and cleanup is vital to DEQ’s decision-making process.

HOW CAN YOU BE INVOLVED IN SUPERFUND?

DEQ relies heavily on public involvement at federal and CECRA Superfund sites in order to make final cleanup decisions. DEQ often goes beyond the public involvement requirements of the federal and state Superfund laws in order to obtain community input. Involvement begins early in the process and continues through operation and maintenance. DEQ staff often meet with local officials in the community to discuss their knowledge of the site and any concerns they might have.

When planning for the remedial investigation begins at federal Superfund sites and major CECRA sites, DEQ or EPA staff interview community members about their opinions and concerns. From these interviews, DEQ produces a community relations plan outlining the community’s interests and needs.

Those who want to be involved in Superfund are urged to consider the following activities:

1. Attend public meetings, workshops and hearings -

DEQ or EPA sponsors public meetings and/or public workshops during the planning of the remedial investigation, upon completion of the remedial investigation, risk assessment and feasibility study, upon DEQ determination that a voluntary cleanup plan is complete, and at other points if necessary.

When the proposed plan for a site remedy is released, DEQ or EPA conducts a formal public hearing to take public comments.

2. Review site documents -

DEQ or EPA places copies of site documents at a location near each site (typically at local libraries). Some of the documents kept there may include the remedial investigation workplan, remedial investigation report, risk assessment, alternative scoping document, feasibility study, proposed remedial plan, site progress reports, and voluntary cleanup plans. A list of established site document repositories in Montana is on page 96 of this publication.

3. Get your name on site mailing lists -

For each site, DEQ or EPA keeps a mailing list. People on these lists receive periodic progress reports (public newsletters) and announcements of public meetings and public comment periods. State law prohibits DEQ from distributing or selling its mailing lists. To be added to any or all of the site mailing lists, complete the mailing list form on page 97 of this report and mail it to:

**Superfund Program
Montana Department of Environmental Quality
P.O. Box 200901
Helena, MT 59620-0901**

4. Be active in a Superfund citizens group -

Several sites in Montana have active citizens groups. If a group does not exist in your area and you wish to form one, DEQ would be happy to assist you.

5. Speak up -

Provide comments, ask questions and voice your concerns at any and all points in the Superfund process. You may write to the DEQ Superfund office as listed above in item 3 or call the Superfund Hotline at 1-800-246-8198 (in-state only) or 1-406-444-1420. You may contact the Montana Operations Office of EPA at the Superfund Hotline or 1-406-441-1150.



ARRO OIL REFINERY, LEWISTOWN

The Arro Oil Refinery site in Lewistown had multiple open sludge pits until the state CECRA program used grant money to remediate the area. The sludges were the waste product of past petroleum refining. After the sludges were removed, the area was regraded and reseeded. It is now returning to the look of the original landscape.



SUMMARY OF MONTANA SUPERFUND ACCOMPLISHMENTS

The following table summarizes work and accomplishments directed by DEQ or EPA Superfund programs at federal Superfund sites and CECRA (state Superfund) sites as of March 1996. Currently, there are eight federal Superfund sites and 279 CECRA sites in Montana.

Because most of the federal Superfund sites cover large areas, they are divided into "operable units," which are distinct parts of the site that can be readily investigated and cleaned up separately. Actions at the various operable units of the federal Superfund sites are shown on the more detailed chart, labeled "Federal Superfund Sites," on the following page.

The table below shows the number of completed actions and on-going actions at federal Superfund and CECRA sites. "Interim cleanups" are partial cleanups designed to stop imminent threats to public health and/or the environment. Additional investigation and cleanup may be needed after an interim cleanup. "Remedial design/remedial action and/or final cleanups" are those where the entire site (for CECRA sites) or an entire operable unit (for federal Superfund sites) has been or is being cleaned up. The other types of actions at the head of each column are described more fully on pages 3 through 5.

Some sites have had more than one interim cleanup. The totals on the table below represent the number of interim cleanups, rather than the number of sites which have had an interim cleanup. There have been a total of 16 interim cleanups completed at nine operable units at federal Superfund sites and a total of 93 interim cleanups completed at 74 CECRA sites.

	Site assessments	Interim cleanups	Remedial investigations/feasibility studies	Remedial design/remedial action and/or final cleanup	Operation and maintenance (if needed)
Federal sites (operable units)	9 completed (site-wide) 0 on-going	16 completed 6 on-going	21 completed 5 on-going	10 completed 9 on-going	7 on-going
CECRA (State) sites	228 completed 1 on-going	93 completed 20 on-going	41 completed 41 on-going	35 completed 8 on-going 10 proposed for '96	0 on-going
TOTALS	237 completed 1 on-going	109 completed 26 on-going	62 completed 46 on-going	45 completed 17 on-going 10 proposed for '96	7 on-going

Note: Although there are now eight federal Superfund sites, the Burlington Northern/Somers site was removed from the list of sites proposed for federal Superfund listing when cleanup work began under a federal Superfund consent decree. All work at Burlington Northern/Somers has been conducted under federal Superfund regulation. Therefore, the site is included in this status summary as a federal site.

FEDERAL SUPERFUND SITES	Site assessment (site-wide)	Interim cleanup actions	Remedial investigation/ feasibility study	Remedial design/ remedial action	Operation and maintenance
MONTANA POLE (BUTTE)	X	X(1),ON-GOING(1)	X	ON-GOING	
ANACONDA	X				
Mill Creek			X	X	
Flue Dust			X	X	ON-GOING
Arbiter/Beryllium			X	X	ON-GOING
Old Works/East Anaconda		X	X	ON-GOING	
Regional Water/Waste/Soils			ON-GOING		
Smelter Hill			X		
Community Soils		X	ON-GOING		
SILVER BOW CREEK/BUTTE AREA	X				
Warm Springs Ponds		X	X	X (2)	ON-GOING
Streamside Tailings			X	ON-GOING	
Rocker		X	X	ON-GOING	
Mine Flooding		X	X	ON-GOING	
Priority Soils		X(7),ON-GOING(3)	ON-GOING		
MILLTOWN RESERVOIR SEDIMENTS	X				
Water Supply			X	X (2)	ON-GOING
Reservoir Sediments			ON-GOING		
Clark Fork River			ON-GOING		
EAST HELENA SMELTER	X				
Process Ponds and Fluids			X	ON-GOING	
Groundwater			X		
Surface Soils/Surface Water		ON-GOING	X		
Slag Pile			X		
Ore Storage Areas			X	X	ON-GOING
IDAHO POLE (BOZEMAN)	X		X	ON-GOING	
LIBBY GROUNDWATER	X				
Buy Water Plan			X	X	ON-GOING
Upper Aquifer and Soils			X	ON-GOING	
Lower Aquifer			X	X	ON-GOING
MOUAT (COLUMBUS)	X	X(2),ON-GOING(1)			
BN SOMERS	X	X	X	ON-GOING	
TOTALS	9 completed	16 completed 6 on-going	21 completed 5 on-going	10 completed 9 on-going	7 on-going

Note: An "X" designates a completed activity (e.g. "X" under the *Remedial Investigation / Feasibility Study* category means a Record of Decision has been issued for this operable unit). A number after an "X" or an "ON-GOING" denotes the number of completed or on-going activities for that operable unit.

STATE SUPERFUND SITES							
	Ranking	Site assessment	Site access control	Interim cleanup actions	Remedial investigation/feasibility study	Final cleanup action	Operation and maintenance
A and S Industries, Poplar	R						
A.J.'s Laundry and Linen, Missoula	L	X		X			
Agency Dump, Agency	M	X					
Alice Creek Post and Pole, Lincoln	M	X		X*			
All American Bumper and Plating, Missoula	L	X		X	X	ON-GOING	
American Dental, Missoula	N	X			X	X	
Anaconda Aluminum Co., Columbia Falls**	R	X		X			
Anaconda Minerals Company, Great Falls **	M	X		X			
Apex Mine, Bannack State Park	R	X		X (2 ACTIONS)			
Arro Oil Refinery, Lewistown	M	X	X	X (2 ACTIONS)	X		
Asarco, Inc. Troy Unit**	R	X					
Basin Mining Site (Basin School Yard)	H	X					
Bass Creek Post and Pole, Stevensville	L						
Beaver Wood Products, Columbia Falls	H	X	X				
Beaverhead National Forest (Elkhorn Mine)	R	X					
Belle Creek Barrel Site, Belle Creek**	L	X				X*	
Belt Creek CCC Camp, Neihart	N	X					
Berg Post and Pole, Lewistown	H	X					
Big Hole Post Plant, Argenta	M						
Big Horn Oil and Refining Co., Billings	L						

* An evaluation is needed to determine whether additional cleanup is necessary.

** The actions were directed by a different regulatory entity besides Superfund (most often DEQ Waste Management Division).

The ranking codes are as follows: MAX = maximum priority; H = high priority; M = medium priority; L = low priority;

N = no further action, and R = referred to another program. Rankings are based on available information and are subject to change.

	Ranking	Site assessment	Site access control	Interim cleanup actions	Remedial investigation/feasibility study	Final cleanup action	Operation and maintenance
Big West Oil Refinery, Kevin	H	X	X	X	ON-GOING		
Billings Grain Terminal	M	X					
Billings PCE Groundwater	M	X					
Billings Sanitary Landfill	R	X					
Bitterroot Valley Sanitary Landfill, Victor	MAX	X		X (2 ACTIONS)	X	PROPOSED FOR 1996	
Blackfeet Pencil Factory, Browning	L	X		X			
Blackfeet Post and Pole, Browning	L	X		X*			
Bohrman's Exxon, Ennis	M	X		X			
Bonneville Power Administration, Hot Springs**	H	X			ON-GOING		
Bootlegger Trail Site, Black Eagle	N	X			X	X	
Borden Inc., Missoula	N	X				X	
Boulder River Railroad, Boulder	L	X					
Bozeman Old City Landfill	L	X					
Bozeman Solvent Site	MAX	X		X (3 ACTIONS)	ON-GOING		
BLM Illegal Airstrip, Flatwillow**	N	X				X	
BLM Steamboat Pt., Loma**	L						
Burlington Northern Derailment Site, Bainville	L			X*			
Burlington Northern Derailment Site, Bridger	M			X*			
Burlington Northern Derailment Site, Evaro	N	X				X	
Burlington Northern Derailment Site, Garrison	N	X					

* An evaluation is needed to determine whether additional cleanup is necessary.

** The actions were directed by a different regulatory entity besides Superfund (most often DEQ Waste Management Division).

The ranking codes are as follows: MAX = maximum priority; H = high priority; M = medium priority; L = low priority;

N = no further action, and R = referred to another program. Rankings are based on available information and are subject to change.

	Ranking	Site assessment	Site access control	Interim cleanup actions	Remedial investigation/feasibility study	Final cleanup action	Operation and maintenance
Burlington Northern Derailment Site, Helena	N	X			X	X	
Burlington Northern Derailment Site, Missoula	N	X					
Burlington Northern Derailment Site, Whitefish**	R	X				ON-GOING	
Burlington Northern Fueling Facility, Billings	M	X					
Burlington Northern Fueling Facility, Butte	M	X					
Burlington Northern Fueling Facility, Essex	M	X					
Burlington Northern Fueling Facility, Glasgow	L	X		X			
Burlington Northern Fueling Facility, Glendive	M	X		X			
Burlington Northern Fueling Facility, Great Falls	M	X		X			
Burlington Northern Fueling Facility, Havre	H	X		X			
Burlington Northern Fueling Facility, Helena	M	X		X			
Burlington Northern Fueling Facility, Huntley	L	X					
Burlington Northern Fueling Facility, Laurel	H	X		X			
Burlington Northern Fueling Facility, Missoula	H	X		X			
Burlington Northern Fueling Facility, Shelby	L	X					
Burlington Northern Fueling Facility, Whitefish	M	X		X			
Burlington Northern Krezelak Pond, Havre	M	X					
Burlington Northern Livingston Shop Complex	MAX	X		X (10 ACTIONS)	X	PROPOSED FOR 1996	
Burlington Northern Paradise Tie Treatment**	R	X			X	ON-GOING	
Burlington Northern Racetrack Pond, Havre	M	X					

* An evaluation is needed to determine whether additional cleanup is necessary.

** The actions were directed by a different regulatory entity besides Superfund (most often DEQ Waste Management Division).

The ranking codes are as follows: MAX = maximum priority; H = high priority; M = medium priority; L = low priority;

N = no further action, and R = referred to another program. Rankings are based on available information and are subject to change.

	Ranking	Site assessment	Site access control	Interim cleanup actions	Remedial investigation/feasibility study	Final cleanup action	Operation and maintenance
Busby CCC Camp	L	X		X*			
Butana Speedway, Butte	M	X					
Butte-Silverbow County Landfill**	R	X			ON-GOING	ON-GOING	
Camas Creek Oil Spill, Hot Springs**	R	X			X	ON-GOING	
Carpenter & Snow Creek Mining Complex, Neihart	H	X					
Carter Oil Refinery, Cut Bank	H	X					
Central Post and Treating Co., Lewistown	L						
Chandelle Lane Barrel Site, Black Eagle	H						
Charles M. Russell Refuge, Turkey Joe Landing	L	X					
Chevron USA, Inc., Browning Bulk (Hoyt Dist.)	L						
Clyde Park Asbestos	N	X			X	X	
CMC Asbestos, Bozeman	M	X	X	X			
CMC Asbestos, Gallatin Gateway	N	X	X	X	X	X	
Coffman Lumber and Treatment Company, Billings	M	X					
Comet Mine (High Ore Creek), Basin**	R	X		X			
Comet Oil Company, Billings	H	X	X	X (2 ACTIONS)	ON-GOING		
Conoco Billings Refinery**	R	X	X	ON-GOING	ON-GOING		
Conoco Landfarm, Billings**	N	X					
Conrad Refining Company	M	X					
Continental Oil Refinery, Lewistown	H	X			RI ON-GOING		

* An evaluation is needed to determine whether additional cleanup is necessary.

** The actions were directed by a different regulatory entity besides Superfund (most often DEQ Waste Management Division)

The ranking codes are as follows: MAX = maximum priority; H = high priority; M = medium priority; L = low priority;

N = no further action, and R = referred to another program. Rankings are based on available information and are subject to change.

	Ranking	Site assessment	Site access control	Interim cleanup actions	Remedial investigation/feasibility study	Final cleanup action	Operation and maintenance
Corbin Flats, Jefferson City	H	X			ON-GOING	PROPOSED FOR 1996	
Creston Post and Pole Yard	H	X	X [*]				
Davis Post Yard, Willow Creek	M	X	X				
Department of Army, AMSA #5, Billings	L						
Department of Energy MSE Test Facility, Butte**	N	X					
Developmental Technology, Bozeman	L					X*	
Diamond Asphalt Refinery, Chinook	H	X	ON-GOING				
Dixon/Perma Dump	M						
Dowell Schlumberger, Glendive	M	X	X	ON-GOING	X		
East of Eden Barrel, near Eden	N	X			X	X	
Empire Sand and Gravel, Billings	M	X			RI COMPLETE		
Energy West Gas Manufacturing Plant, Great Falls	M	X			RI ON-GOING		
Engine Rebuilders, Missoula	H	X			X	PROPOSED FOR 1996	
Ermont Mill Tailings, Argenta	R	X					
Evans Post and Pole, Browning	N	X		X*			
Exxon Refinery & Old Flare Site, Billings**	R	X		ON-GOING	RI ON-GOING		
Falls Chemical Inc., Great Falls	N	X	X	X	X	X	
Farmers Union Central Exchange, Laurel**	R	X		ON-GOING	RI-ONGOING		
Fisher Flats Dump	L						
Flathead County Landfill**	R	X			ON-GOING		

* An evaluation is needed to determine whether additional cleanup is necessary.

** The actions were directed by a different regulatory entity besides Superfund (most often DEQ Waste Management Division). The ranking codes are as follows: MAX = maximum priority; H = high priority; M = medium priority; L = low priority; N = no further action, and R = referred to another program. Rankings are based on available information and are subject to change.

	Ranking	Site assessment	Site access control	Interim cleanup actions	Remedial investigation/feasibility study	Final cleanup action	Operation and maintenance
Flathead Mines**	R	X					
Flathead Post and Pole, Agency	M	X		X*			
Fort Missoula OMS #2	M	X			RI ON-GOING		
Fort Peck Project	M	X					
Frohner Meadow (Nellie Grant), Clancy	R	X		X	X	PROPOSED FOR 1996	
Ft. Keogh Livestock & Range Lab, Miles City	L	X		X			
General Electric Company, Billings**	L	X		X*			
Georgetown Railroad	H	X					
Geraldine Airport	N	X			X		
Glasgow Air Force Base	M	X		X	RI ON-GOING		
Golden Messenger Mine, York**	N	X			X	X	
Goldsil Mining Co., Marysville	R	X		X			
Granite Timber Co., Philipsburg**	H	X		X			
Great Falls City Landfill (25th Ave.)	M						
Great Falls City Landfill (Wiremill Rd.)	N	X			X	X	
Great Falls City/County Barrel Site	N	X			X	X	
Great Falls International Airport, MTANG	M	X		X	RI ON-GOING		
Great Falls Refinery/Phillips Petroleum**	R	X		ON-GOING	RI ON-GOING		
Harlowton Milwaukee Roundhouse	M	X					
Harlowtown Weed Control District**	R	X		X			

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** The actions were directed by a different regulatory entity besides Superfund (most often DEQ Waste Management Division)

The ranking codes are as follows: MAX = maximum priority; H = high priority; M = medium priority; L = low priority;

N = no further action, and R = referred to another program. Rankings are based on available information and are subject to change.

	Ranking	Site assessment	Site access control	Interim cleanup actions	Remedial investigation/feasibility study	Final cleanup action	Operation and maintenance
Hart Oil Refinery, Missoula	H	X	X		RI COMPLETE	PROPOSED FOR 1996	
Havre Refinery	L						
Haywire Mill, Yaak	M			X			
Helena Landfill**	R	X			RI ON-GOING		
Helena Regional Airport	M	X	X				
Hirschy Corrals, Wisdom	M	X					
Homco Facility, Glendive	N	X			X	X	
Hungry Horse Dam Townsite	M	X					
Ideal Basic Industry Plant Site Area, Trident	L	X					
J & N Post and Pole, Evaro	M	X					
Jardine Arsenic Tailings, Jardine	R	X		X*			
Jefferson County Weed District, Clancy**	N	X			X	X	
Jet Fuel Refinery, Mosby	H	X		ON-GOING	RI ON-GOING		
Joliet Weed District	M	X	X		X	PROPOSED FOR 1996	
Joslyn Street Tailings, Helena	H	X	X			PROPOSED FOR 1996	
Kaiser Cement, Montana City	R	X		X			
Kalispell Air Force Station, Lakeside	M	X		X	RI ON-GOING		
Kalispell City Landfill (Cemetery Road)	M	X					
Kalispell City Landfill (Willow Glen Road)	M	X					
Kalispell Pole and Timber Co. Inc.	H	X	X		RI ON-GOING		

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The ranking codes are as follows: MAX = maximum priority; H = high priority; M = medium priority; L = low priority;

N = no further action, and R = referred to another program. Rankings are based on available information and are subject to change.

	Ranking	Site assessment	Site access control	Interim cleanup actions	Remedial investigation/feasibility study	Final cleanup action	Operation and maintenance
Karst Asbestos Mine, Gallatin Gateway	R	X					
Kendall Venture Mine, Hilger**	R	X		X			
Kenison Pole Plant, Townsend	L						
King's Creek, Hays	R	X		ON-GOING			
L and R Trucking, Libby	M	X					
Lake County Weed District, Ronan	N	X			X		
Lame Deer Drums	N	X				X	
Larry's Post and Treating Co., Columbia Falls	M	X	X				
Lattice Materials, Bozeman	L	X		X	X	X*	
Laurel Oil and Refining Co., Butte	L						
Lewis & Clark National Forest, Hughesville	H	X		X			
Lewis Construction/Vaughn Gravel Pit**	R	X		X*			
Libby Barrel Site	N	X			X	X	
Lima Union Pacific Railroad	N	X			X	X	
Lockwood Solvent Site, Billings**	H	X		X	ON-GOING		
Lodge Grass Drums	N	X				X	
Lohof Gravel Pit, Billings	M	X					
Londonderry Mine, Maxville	R	X					
Malmstrom Air Force Base, Great Falls**	R	X		ON-GOING	RI ON-GOING		
Malta Airport	M	X					

* An evaluation is needed to determine whether additional cleanup is necessary.

** The actions were directed by a different regulatory entity besides Superfund (most often DEQ Waste Management Division).

The ranking codes are as follows: MAX = maximum priority; H = high priority; M = medium priority; L = low priority;

N = no further action, and R = referred to another program. Rankings are based on available information and are subject to change.

	Ranking	Site assessment	Site access control	Interim cleanup actions	Remedial investigation/feasibility study	Final cleanup action	Operation and maintenance
Marble Creek Post Yard, Superior	L						
McCulloch Purchase Station, Fairview	L						
McLaren Mill Tailings, Cooke City	R	X		X			
Mercer Post Plant, Bozeman	L						
Microbial Biotechnology, Inc., Polson	L	X		X*	X		
Midway Store Dump, Ravalli	M						
Midwest Refining Co., Conrad	L						
Miles City Airport	N	X			X		
Miles City Livestock Center	M	X					
Miles City Oil Refinery	M						
Miles City Railyard	H	X		X (2 ACTIONS)			
Milwaukee Road, Haugan	H	X					
Milwaukee Road Right-Of-Way Spill, St. Regis	N	X					
Milwaukee Roundhouse, Deer Lodge	H	X			ON-GOING		
Mission Wye, Livingston	H	X		ON-GOING	X		
Missoula Landfill**	R	X			RI COMPLETE	ON-GOING	
Missoula Sawmill**	M	X		X	RI COMPLETE		
Missoula Vo-Tech	M						
Missoula White Pine Sash	H	X			RI ON-GOING		
Moe Chevrolet, Poplar**	M	X		X			

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The ranking codes are as follows: MAX = maximum priority; H = high priority; M = medium priority; L = low priority;

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	Ranking	Site assessment	Site access control	Interim cleanup actions	Remedial investigation/feasibility study	Final cleanup action	Operation and maintenance
Montana Army National Guard Fuel Spill, Great Falls	N	X				X	
Montana Power Company Frank Bird Plant, Billings	L						
Montana Power Company JE Corette Plant, Billings	R						
MPC Manufactured Gas Plant, Helena	M	X	X		X	PROPOSED FOR 1996	
MPC Mercury Sites, state-wide	L	X				ON-GOING	
Montana Power Company Storage Yard, Butte	M	X		X			
Montana Radiator Works, Billings	L						
Montana Rail Link, 1930 South Ave. W., Missoula	N	X			X	X	
Montana Rail Link Asbestos, Bozeman	N	X			X	X	
Montana State Chemical Laboratory Bureau, Helena	N	X					
Montana State University, Bozeman	N	X					
Montana Sulphur and Chemical Company, Billings	M						
Mother Lode Gold and Silver Ltd., East Helena	N	X				X	
MT Dept. of Transportation Shop, Helena	M	X			RI ON-GOING		
Muster's Post Yard, Thompson Falls	M	X					
National Bison Range, Moiese	N	X					
North American Oil Refinery, Kalispell	L	X					
Old Agency Landfill, Fort Belknap	H	X					
Old Arlee Dump	L						
Old Charlo Dump	L						

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The ranking codes are as follows: MAX = maximum priority; H = high priority; M = medium priority; L = low priority;

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	Ranking	Site assessment	Site access control	Interim cleanup actions	Remedial investigation/feasibility study	Final cleanup action	Operation and maintenance
Old Community Dump, Ronan	M						
Old Crow Agency Dump	M						
Old Lane Deer Dump	M						
Old Libby Airport Pole Treating Plant	N	X			X	X	
Old Montana Prison Asbestos, Deer Lodge	N	X			X	X	
Old Poplar Landfill	M	X					
Old Stickney Dump, Missoula	M	X					
Opheim Asbestos	H	X					
Oswego Landfill	L						
Pacific Hide and Fur - 4th Ave., Billings	M	X		X	RI ON-GOING		
Pacific Hide and Fur - Minnesota Ave., Billings	M	X		X	RI ON-GOING		
Park Co. Landfill, Livingston**	R	X		X	RI ON-GOING		
Petroleum Refining Co., Shelby	L	X	X	X (3 ACTIONS)			
Pierce Packing Plant, Billings	L	X		X (2 ACTIONS)	X		
Pine Tree Timber, Belgrade	H	X		X	RI ON-GOING		
Plum Creek Evergreen, Kalispell	N	X				X	
Poisoned Oats Disposal, Browning	L						
Poplar Post Office	R	X		X			
Prairie View Recreational Park, Billings	M	X					
Precious Metals Plating Facility, Bonner	H	X		X	RI COMPLETE FS ON-GOING	PROPOSED FOR 1996	

* An evaluation is needed to determine whether additional cleanup is necessary.

** The actions were directed by a different regulatory entity besides Superfund (most often DEQ Waste Management Division).

The ranking codes are as follows: MAX = maximum priority; H = high priority; M = medium priority; L = low priority;

N = no further action, and R = referred to another program. Rankings are based on available information and are subject to change.

	Ranking	Site assessment	Site access control	Interim cleanup actions	Remedial investigation/feasibility study	Final cleanup action	Operation and maintenance
Railroad Tie Treating Yard, White Sulphur Springs	M	X				X*	
Rau Disposal Pit, Sidney	M	X					
Real Log Homes Manufacturing Site, Missoula	M	X		X*			
Red Rocks Lake Nat'l Wildlife Refuge, Lakeview	M	X			RI COMPLETE	ON-GOING	
Reliance Refinery, Kalispell	H	X	X		RI ON-GOING		
Reva's Creek Mine, Dixon	R						
Richey Airport	N	X		X	X		
Riverside Post & Pole Plant, De Borgia**	N	X				X	
Rocky Boy Post and Pole	M	X		X*			
Rocky Mountain Laboratory, Hamilton	M	X			RI ON-GOING		
Rocky Mountain Phosphate, Garrison	M	X		X*			
Roundup Landfill	L	X					
Roundup Refining Co., Butte	L						
Russell Oil Company, Billings	L						
Russell Oil Company, Butte	L						
S&W Sawmill, Darby	H	X					
Safety Kleen, Helena	L						
Saint Labre Plastic Factory, Ashland	M						
Saint Regis Battery Pit	L	X				X*	
Sannes Farm, Silesia	R	X					

* An evaluation is needed to determine whether additional cleanup is necessary.

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The ranking codes are as follows: MAX = maximum priority; H = high priority; M = medium priority; L = low priority;

N = no further action, and R = referred to another program. Rankings are based on available information and are subject to change.

	Ranking	Site assessment	Site access control	Interim cleanup actions	Remedial investigation/feasibility study	Final cleanup action	Operation and maintenance
Scott Feed Lot, Billings	M	X					
Scratchgravel Landfill, Helena**	R	X		X	RI ON-GOING		
Sluice Gulch Leaking Mine Adit, Philipsburg	R	X					
Somers Marina	M	X					
Stauffer Chemical Co., Ramsay	R	X					
Strongs Post Yard, Livingston	L						
Strunk Mining, Lewistown	M	X					
Summit-Dana Ltd., Bozeman	L						
Tank Hill, Cut Bank	H	X		X	ON-GOING		
Tennile Creek, Helena	H	ON-GOING					
Texaco-Sunburst Works Refinery	M	X	X	X	RI COMPLETE FS ON-GOING		
Third Street (NW) Groundwater, Great Falls	M	X					
Thompson Falls Reservoir	L	X					
Thorium City Waste Dump, Grant	R	X					
Townsend Post and Pole	M	X					
Transbas, Billings**	R	X		ON-GOING			
Treasure State Refining Co., Shelby	L	X					
Tucson Hebrew Academy, Del Bonita	H	X					
Tule Creek Gas Plant/Crystal Oil, Poplar	M	X					
Tungsten Mill Tailings, Glen**	H	X		X	X		

* An evaluation is needed to determine whether additional cleanup is necessary.

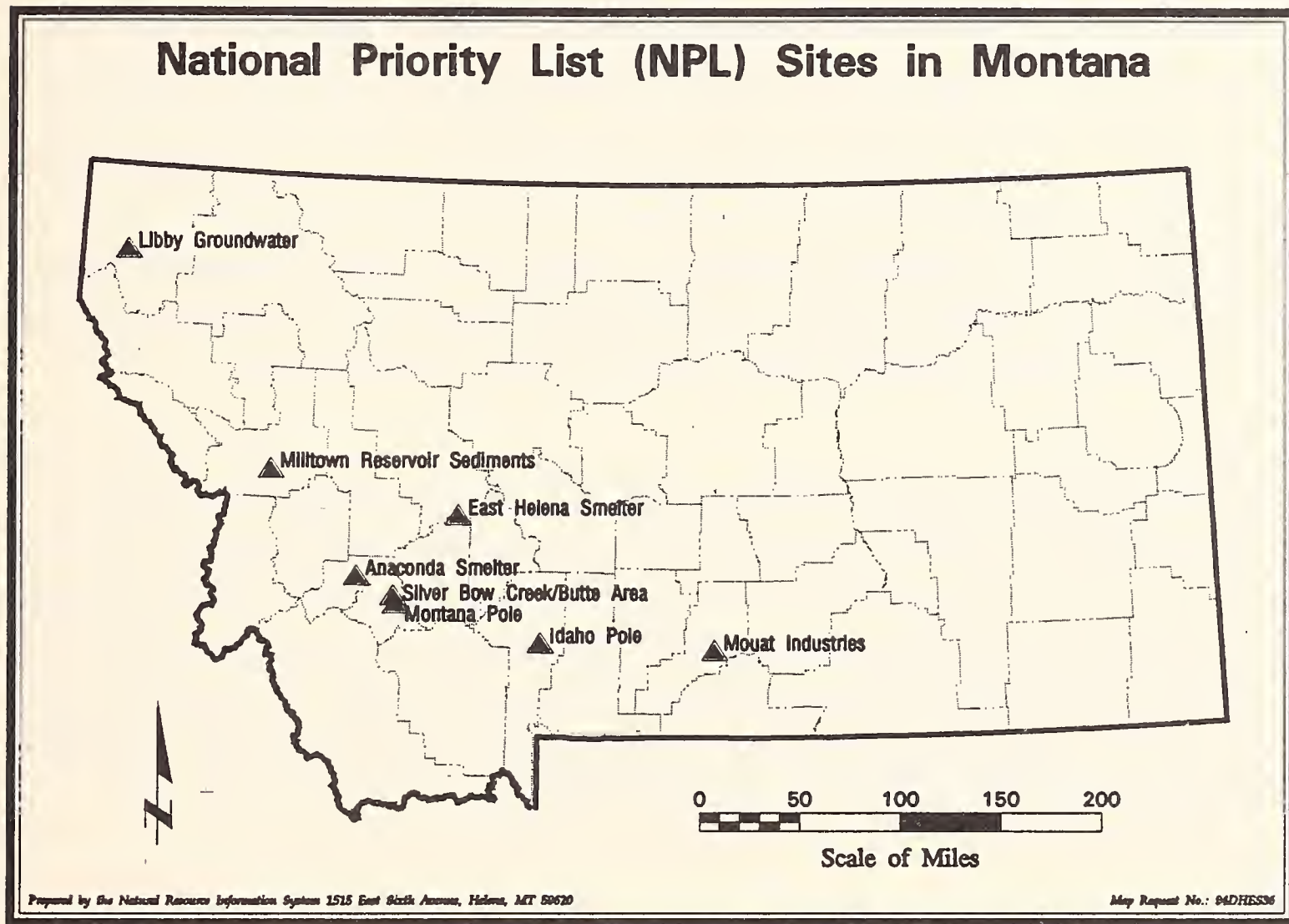
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N = no further action, and R = referred to another program. Rankings are based on available information and are subject to change.

	Ranking	Site Assessment	Site Access Control	Interim Cleanup Actions	Remedial Investigation/ Feasibility Study	Final Cleanup Action	Operation and Maintenance	
Twin Creeks Logging Camp, Bonner**	R	X		ON-GOING				
U.S. Antimony Corp., Thompson Falls	R	X						
Union Oil-Cut Bank Refinery**	R	X		ON-GOING				
Union Tank Car Co., Laurel	M	X		X				
Upper Blackfoot Mining Complex, Lincoln	H	X		ON-GOING (7)	RI ON-GOING			
Valley Garden Vat, Ennis	M	X						
WAPA Shelby Sub-Station	L	X			X	X*		
Weowna Oil Refinery, Winnett	L							
West Bootlegger Barrel Site, Black Eagle	H							
West Front Battery, Missoula	N	X			X	X		
West Second Street, Havre	M							
Western By-Products, Great Falls**	M	X		X*				
Wickes Smelter	R	X						
Wilsall PCB	N	X	X		X	X		
Wolf Point Refinery (Kenco Refinery)	H							
Yale Oil Corp., Kalispell	M	X	X	X				
Yale Oil of South Dakota, Billings	M	X						
Yellowstone Bridge Asbestos, Livingston	M		X	ON-GOING				
Zortman Landusky Mines, Zortman	R	X						
TOTALS	COMPLETED	----	228	24	93	41	35	0
	ON-GOING	---	1	1	20	41	8	---
	PROPOSED FOR 1996						10 for 1996	

MONTANA'S SITES - A SUMMARY



FEDERAL SITES

Following is a brief summary of the federal Superfund sites where DEQ or EPA has conducted investigations or cleanup activities. Because it is being cleaned up under a federal Superfund consent order, the Burlington Northern/Somers site is listed with the federal Superfund sites. However, since it is not an officially listed federal Superfund site, it appears also on the CECRA site list. On federal sites, potentially responsible parties (PRPs) are the equivalent of potentially liable persons (PLPs) on state sites.

ANACONDA SMELTER

Listed - September 1983

Administrative orders on consent for investigation - 1984 (2), 1988 (2)

Administrative orders on consent for interim actions - 1991, 1992 (2)

Records of decision: Mill Creek - 1987; Flue Dust - 1991; Old Works - 1994

Consent decree for final cleanup: Mill Creek - 1987

The Anaconda site is located in and around the city of Anaconda near the headwaters of the upper Clark Fork River and Warm Springs, Mill, Willow and Silver Bow creeks.

Copper smelting took place for 100 years at the site. Site contaminants include arsenic, cadmium, lead, beryllium, copper, zinc and possibly some petroleum-based compounds. Identified problems include impacted surface and groundwater, windblown dust, waste tailings ponds and large volumes of slag and waste material. Field investigations began in 1984. In 1987, the first record of decision was issued, calling for the permanent relocation of all residents from the community of Mill Creek because of high urinary arsenic in local children.

EPA has enforcement lead responsibility for the site. A PRP, Atlantic Richfield Company (ARCO), is conducting site activities including field investigations, removal actions, evaluation of cleanup alternatives and final remedy construction.

ARBITER/BERYLLIUM:

The Arbiter plant was used to recover copper from smelter wastes. Beryllium was used during research to produce a metal alloy. Approximately 280,000 cubic yards of waste from the Arbiter and Old Works Tailings Ponds were placed in a lined repository on Smelter Hill. Beryllium wastes located in the Opportunity Ponds and on Weather Hill were removed and placed in another repository on Smelter Hill. This activity was completed in 1994. Long-term groundwater monitoring of both repositories is planned and will coincide with monitoring of the flue dust repository.

FLUE DUST:

Flue dust is the fine-grained material that settled out in flues connected to the main Anaconda smokestack during the smelting process. It has high concentrations of heavy metals and arsenic. Approximately 350,000 cubic yards of flue dust were solidified and placed in a lined repository on Smelter Hill. The action was completed in 1994.

OLD WORKS/EAST ANACONDA DEVELOPMENT AREA:

The Old Works is the site of the first smelter in Anaconda. The remedial investigation and feasibility study were completed in September 1993, and EPA issued the record of decision in March 1994 which identified a combination of surface water and runoff controls, waste consolidation, and capping and revegetation as the primary components of the remedy. It did not specify any cleanup requirements for groundwater since that will be addressed under the Regional Water, Waste and Soils operable unit. ARCO and the local community determined completion of a golf course and historic trail would be compatible with the remedy. The golf course and trail are expected to open in 1997.

REGIONAL WATER, WASTE AND SOILS:

This operable unit includes a site-wide investigation of contaminated groundwater, surface water and soils resulting from widespread distribution of smelting wastes and soil contamination at the Anaconda site. The ecological risk assessment, which identifies the

risk to aquatic and terrestrial life from arsenic and heavy metals, will be completed in 1996. The remedial investigation report and the feasibility study are planned for completion in 1996, with a record of decision expected in early 1997. This will be the final cleanup decision for the entire Anaconda Smelter site.

SMELTER HILL:

This operable unit includes the hill and area around the main Anaconda Smelter stack. The final remedial investigation report will be completed in 1996. The feasibility study will be completed as part of the Regional Water, Waste and Soils operable unit, and the final cleanup action will be determined in the final 1997 record of decision.

COMMUNITY SOILS:

The Community Soils operable unit includes identification of soils in local communities which are contaminated with arsenic and heavy metals in concentrations presenting a threat to public health.

The Community Soils remedial investigation report will be completed in 1996 and will characterize the nature and extent of soils contaminated with arsenic and heavy metals. The human health risk assessment, completed in 1996, identifies areas where contaminated soils may pose a threat to public health. The areas of risk identified will be included in the Community Soils remedial investigation. The Community Soils feasibility study and record of decision are expected in 1996.

BURLINGTON NORTHERN/SOMERS

Listed - This site was proposed for listing in October 1984 but was never listed. It was withdrawn from the proposed list in early 1990.

Administrative order on consent for investigation - 1985

Administrative order on consent for interim actions - 1985

Record of decision for site-wide cleanup - 1989

Consent decree for final site-wide cleanup - 1991

Located on the northwest shore of Flathead Lake (the largest natural freshwater lake west of the Mississippi River) in the town of Somers, this site was used by Burlington Northern Railroad from 1901 to 1986 for treatment of railroad ties. Creosote wastes have contaminated soils and groundwater on and around this 80-acre site. Construction of a land treatment unit has been completed, and cleanup of soils using bioremediation began in 1993. (Bioremediation is a process in which microbial action is enhanced to naturally break down organic contaminants into non-toxic materials.) Groundwater cleanup began in 1993 and includes pumping and treating as well as in-place bioremediation. Soil cleanup is expected to take six to 10 years, and groundwater treatment will take 50 years. This is an EPA enforcement lead site, and PRPs are undertaking all site work.

EAST HELENA SMELTER

Listed - September 1983

Administrative order on consent for investigation - 1984, 1988

Administrative order on consent for interim actions -1991

Record of decision: Process Ponds - 1989

Consent decree for final cleanup: Process Ponds - 1990

This site is located in and around the American Smelting and Refining Company (ASARCO) Smelter in East Helena. Major problems include contamination of groundwater, sediments and soils by lead and arsenic as a result of more than 100 years of lead smelting at this active plant. Contamination has spread from a variety of sources at the plant to groundwater, surface water and soils. EPA has the enforcement lead, and ASARCO is conducting site investigation, removal of contaminated residential and street soils, and alternative cleanup evaluations.

GROUNDWATER:

Shallow groundwater beneath the plant has elevated concentrations of arsenic. Alternatives for a groundwater remedy are still under investigation. The first step in cleaning up the groundwater was reducing the amount of arsenic and metal coming from the process ponds. An evaluation is underway of the effects of the process ponds cleanup on groundwater quality.

ORE STORAGE AREAS:

Until 1990, ore was stored outdoors at the plant. Dust blowing off the ore piles contained high levels of arsenic, lead and other heavy metals, creating a potential health threat. Ore is now stored in an indoor facility.

PLANT PROCESS FLUIDS AND PONDS:

Heavy metals contamination has migrated from four process ponds in the smelter complex to shallow groundwater and Prickly Pear Creek. In 1989, ASARCO agreed to eliminate the ponds from the plant's process water system, thus stopping sources of contamination to the ponds, groundwater and surface water. Storage tanks have been built to store the process water.

Construction of a stormwater collection system for the plant is scheduled to begin in 1996. Dredging of the contaminated sediments in the pond bottom of Lower Lake began in 1993 and has been completed.

SLAG PILES:

Slag is the black, glassy substance resulting from smelting. Because it effectively binds and immobilizes heavy metals, the agencies have determined that slag does not present a contamination risk.

SOILS AND SURFACE WATERS:

In 1991, ASARCO began the removal and replacement of lead-contaminated residential yards in East Helena. Approximately 475 residential yards, as well as 160 sections of unpaved streets, street aprons, alleys, and parking lots, have been replaced to date. Beginning in 1996, the East Helena Lead Education and Abatement Program assumed responsibility for residential yard cleanup, reflecting an appropriate modification in the scope of cleanup. The Wilson irrigation ditch in the Manlove subdivision has also been cleaned up.

Surface water investigations include Prickly Pear Creek and Lake Helena. Future activities will include a determination of the severity of contamination and the alternatives for future cleanup action, if necessary.

IDAHO POLE

Listed - June 1986

Unilateral administrative order for interim actions - 1978

Record of decision for site-wide cleanup - 1992

Unilateral administrative order for final site-wide cleanup - 1993

The Idaho Pole site is located on the north side of Bozeman near the confluence of Rocky and Bozeman creeks and covers about 50 acres. This site is an active wood-treating operation owned by the Idaho Pole Company and has been in operation since 1946. Contamination consists of oily wood treating fluid wastes: pentachlorophenol and related chlorinated phenols, polynuclear aromatic hydrocarbons and dioxins/furans. Contamination has spread to nearby soils, groundwater and surface water. Two nearby private domestic wells have been contaminated with pentachlorophenol. One residence has been unoccupied since 1985, and the other had a well water treatment system installed in 1991 and has since been bought by Idaho Pole Company.

DEQ completed the remedial investigation, feasibility study and record of decision in 1992. The Idaho Pole Company and Burlington Northern agreed in 1993 to implement site cleanup under the terms of an administrative order issued by EPA. Cleanup began in 1995 and is expected to take five to 10 years. The cleanup consists of excavation and bioremediation of soils in a land treatment unit (see photo and description on page 30), soil flushing, pumping and treating of contaminated groundwater, and in-place bioremediation.



At wood-treating sites such as Montana Pole, Idaho Pole and the Libby Groundwater site, soils contaminated with wood-treating compounds are "cleaned" using biological treatment. Soils are placed in a lined land treatment unit (shown here) and the top layer of soils is tilled to aerate the soil. Microbes break down the wood-treating chemicals and reduce concentrations to safe levels.

LIBBY GROUNDWATER

Listed - September 1983

Administrative order on consent for investigation - 1986

Administrative order on consent for interim actions - 1986

Records of decision: upper aquifer, soils - 1988; drinking water supply, well ban - 1986

Consent decree for final cleanup: total site - 1989

This site is an active lumber mill in Libby. From 1946 to 1969, wood-treating wastes were disposed of and spilled at several locations onsite. In 1979, sampling of private wells showed contamination with wood-treating compounds, including pentachlorophenol and creosote. The community implemented a well-drilling ban to protect public health, and Champion International, the PRP, provided an alternate water supply for contaminated wells. The site is being addressed through EPA enforcement with the PRP conducting the necessary studies and work.

UPPER AQUIFER AND SOILS:

Contaminated groundwater in the upper aquifer is being cleaned up by pumping and treating, which is supplemented with treatment in place. Contaminated soils were excavated and are being treated by bioremediation in two specially designed land treatment units. Treatment is expected to take five to 10 years.

LOWER AQUIFER:

A feasibility study evaluated the alternatives available for cleaning up the deep aquifer. Currently, no technology is available to remove contaminants from this aquifer. In 1993, EPA and DEQ selected the final remedy for the lower aquifer, which consists of continued

restriction on private water supply wells and long-term monitoring to protect public health and the environment. Local government has implemented restrictions on private wells. EPA has ordered Champion to continue long-term monitoring.

MILLTOWN RESERVOIR SEDIMENTS

Listed - September 1983

Administrative order on consent for investigation - 1989

Records of decision: water supply, well/main lines - 1984, contaminated plumbing -1984

The Milltown Reservoir Sediments site extends approximately 100 river miles along the Clark Fork River from the Warm Springs Ponds to Milltown Dam, five miles east of Missoula. Contamination consists of mining waste transported downstream from more than 100 years of mining in the upper Clark Fork River Basin. Arsenic and heavy metals have accumulated in Milltown Reservoir and have contaminated river sediments, surface water and groundwater. In 1981, DEQ discovered that wells supplying some Milltown residents were contaminated with arsenic. The contaminated wells were abandoned, and a new community water supply system was installed in 1985. It was later determined arsenic had migrated from the reservoir sediments into the groundwater.

RESERVOIR SEDIMENTS:

Prior to 1989, DEQ addressed this operable unit using federal funds through a Superfund cooperative agreement with EPA. In 1989, EPA assumed the enforcement lead responsibilities. ARCO conducted the remedial investigation between 1990 and January 1995. ARCO will complete the detailed evaluation of alternatives in 1996. EPA and DEQ anticipate issuing a proposed plan and a record of decision in 1997.

CLARK FORK RIVER:

ARCO conducted preliminary remedial investigation activities on the Clark Fork River operable unit during 1993. ARCO initiated remedial investigation/feasibility study work in 1995 under the terms of an administrative order on consent with EPA. EPA and DEQ will present a proposed plan in late 1997 with a record of decision following in 1998.

MONTANA POLE

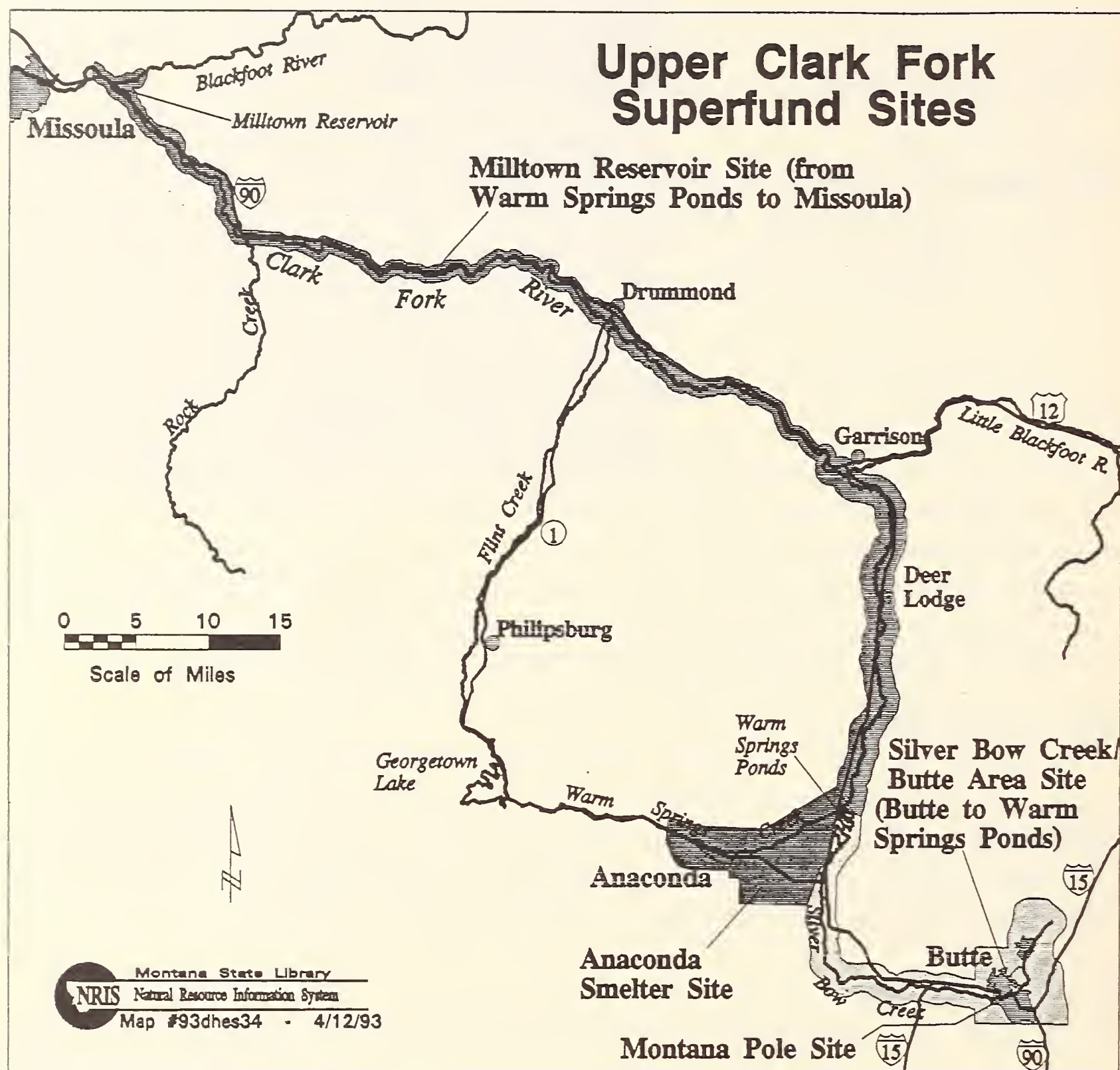
Listed - July 1987

Administrative order on consent for investigation - 1990

Record of decision for site-wide cleanup - 1993

Consent decree for final cleanup - 1996

The Montana Pole and Treating Plant site is an abandoned 40-acre wood-treating facility in Butte. The Montana Pole site operated from 1946 until 1984 and is one of four



Clark Fork Basin Superfund sites. Contamination consists of wood-treating products including pentachlorophenol and related chlorinated phenols, polynuclear aromatic hydrocarbons, dioxins/furans and petroleum compounds which have spread into surrounding soils, groundwater and adjacent Silver Bow Creek.

In response to oil and wood-treating fluids seeping into Silver Bow Creek, EPA conducted an emergency removal of contaminated soil beginning in 1985. Highly contaminated soil was excavated, bagged and stored with contaminated equipment in four large pole barns onsite.

EPA also installed a system to pump and treat contaminated groundwater to recover wood-treating chemicals and to prevent contamination from reaching the creek. Updated in 1992, this pump and treatment system will continue operating at least until the final

remedy is implemented.

ARCO began a remedial investigation and feasibility study in 1990 under the direction of DEQ as lead agency. These activities were completed in 1993.

DEQ released the remedial investigation, feasibility study and proposed plan for public comment in the spring of 1993. EPA and DEQ issued the record of decision in September 1993. The selected remedy requires contaminated soils to be excavated and biologically treated on site in a land treatment unit. Contaminated groundwater will be prevented from migrating and entering Silver Bow Creek and will be treated on site.

DEQ completed the engineering design of Phase I of the remedy in early 1996. Cleanup actions, conducted by DEQ with funding from the responsible parties under the terms of a consent decree, began in 1996. Soil cleanup is expected to take about 10 years, and groundwater cleanup is expected to last 30 years.

MOUAT INDUSTRIES

Listed - June 1986

Unilateral administrative order for interim action - 1991

Groundwater engineering evaluation/cost analysis - 1996

The Mouat site is near the airport in Columbus. Mouat Industries operated a processing plant for high-grade sodium dichromate. Contaminants include residues of chromium ore processing wastes. Contamination has affected surface soil and groundwater. The site historically has presented a potential threat to the Yellowstone River adjacent to the site. Groundwater beneath the site is moving toward the river. In 1990, EPA's Emergency Response Branch erected an eight-foot chain link fence around the site to limit public access to the contaminants. During 1992, EPA initiated emergency removal work at the site and began investigating contaminated soil and groundwater. Cleanup of soils by PRPs was completed in 1994.

EPA is monitoring nearby wells for contamination because dissolved chromium has been found in the groundwater. An engineering evaluation/cost analysis to evaluate remedies for groundwater will be completed in 1996. An action memorandum will document the selected remedy and will be completed in 1996.

SILVER BOW CREEK/BUTTE AREA

Listed - September 1983

Administrative orders on consent for investigation - 1990 (2), 1991 (2), 1992

Administrative orders on consent for interim actions - 1988, 1989 (2), 1990 (2), 1992

Unilateral administrative orders for interim actions - 1989, 1992 (2)

Records of decision: Warm Springs Ponds, Active Area - 1990; Inactive Area - 1992;

Butte Mine Flooding - 1994; Rocker - 1995; Streamside Tailings - 1995

Unilateral administrative orders for final cleanup: Warm Springs Ponds Active Area - 1991; Inactive Area - 1993; Rocker - 1996; Streamside Tailings - 1996

The Silver Bow Creek/Butte Area site begins in Butte and extends 26 miles along Silver Bow Creek through the Warm Springs Ponds. Site contamination is the result of more than 100 years of mining and related activities in Butte and the upper Clark Fork Basin. During the 1800s through the first part of this century, mining wastes were often dumped directly into nearby waterways. Contaminants in mining wastes are primarily arsenic and metals including cadmium, copper, lead, mercury and zinc. These mining wastes can be found in residential areas of Butte, in irrigation ditches, and along the drainages and banks of Silver Bow Creek. The Warm Springs Ponds were constructed between 1910 and 1955 to reduce the volume of mine wastes entering the Clark Fork River.

SILVER BOW CREEK PORTION OF THE SITE

The Silver Bow Creek portion of the site consists of three main operable units. The highest priority has been the Warm Springs Ponds because they were determined to present the greatest potential threat to the Clark Fork River.

Prior to 1989, this site was addressed by DEQ using federal funds through a Superfund cooperative agreement with EPA. DEQ now has the enforcement lead on the Streamside Tailings operable unit. In 1989, EPA assumed lead responsibility for Rocker and Warm Springs Ponds operable units. ARCO has been conducting the remedial investigations and feasibility studies for this site since 1990.

WARM SPRINGS PONDS:

At the turn of the century, mine wastes dumped into Silver Bow Creek were carried downstream into the Clark Fork River. In the 1910s, tailings ponds were built on Silver Bow Creek near Warm Springs to allow sediments and metals to settle to the bottom of the ponds. The ponds were enlarged substantially in the 1950s. Beginning in 1967, lime was added to the ponds to increase the system's ability to precipitate out metals. The pond system now contains an estimated 19 million cubic yards of contaminated sediments. The Warm Springs Ponds consist of the active area (Ponds 2 and 3) which is currently treating water and the inactive area (Pond 1 and the area below Pond 1) which is no longer used for treatment.

The Mill-Willow Bypass adjacent to the pond system was used to pass relatively clean water or flood water around the ponds. Tailings along the bypass channel were a major source of contamination which caused fish kills in the upper Clark Fork River. Under an administrative order on consent between EPA and ARCO in 1990, the bypass was cleaned up and the channel reconstructed to enhance the fishery.

All of the cleanup construction work for the Warm Springs Ponds has been completed. On-going treatment of incoming water will be necessary until Silver Bow Creek is cleaned



The Mill-Willow Bypass, adjacent to Warm Springs Ponds, is pictured before cleanup occurred (left) and after cleanup occurred (below).

Heavy metals in the Mill-Willow Bypass adjacent to the Warm Springs Ponds were found to be a primary cause of fish kills in the Clark Fork River. Metals which concentrated on the surface of the tailings during summer dry periods were washed into the bypass, then into the Clark Fork River, during thunderstorms. Removal of the tailings and reconstruction of the bypass by the PRP should help prevent further fish kills.



up. Ecological and water quality monitoring is also continuing.

ROCKER:

The town of Rocker is located about five miles west of Butte. The Rocker Timber Framing and Treating Plant treated mine timbers with a copper and arsenic solution until 1957. In 1989, DEQ ordered ARCO to remove the most highly contaminated soils because of the potential health threat to nearby residents. In July 1991, EPA, DEQ and ARCO entered into an administrative order on consent for a remedial investigation and feasibility study at the site. ARCO conducted this study between 1991 and 1995.

EPA and DEQ issued a record of decision for the site in December 1995. The principal components of the record of decision include: excavation of contaminated source materials; in-place treatment of groundwater using iron; natural attenuation of residual groundwater contamination; treatment of excavated materials with iron; placement of treated wastes in an on-site repository; revegetation; institutional controls including a well ban near the site, and an alternate water supply upgrade for the local community. EPA issued a unilateral administrative order for site cleanup to ARCO in 1996. Remedial design is expected to begin in 1996.

STREAMSIDE TAILINGS:

Large amounts of tailings have been deposited within and on the banks of Silver Bow Creek between the Colorado Tailings in Butte and the Warm Springs Ponds. Because vegetation will not grow in these contaminated areas, they are typically bare and are susceptible to wind and water erosion. Silver Bow Creek's surface water is severely degraded by the contamination. No fish are able to live in its waters. ARCO completed remedial investigations of groundwater, soils and surface water in 1994 and the feasibility study in 1995.

DEQ and EPA issued a record of decision for this operable unit in November 1995. The decision requires a combination of removal and on-site treatment of tailings. Highly contaminated instream sediments and railroad materials will also be removed. In 1996, EPA issued a unilateral administrative order to ARCO to implement the remedy. Remedial construction activities are expected to begin in 1997.

THE BUTTE AREA PORTION OF THE SITE

Butte was added to the Silver Bow Creek site in 1987. EPA began remedial investigations of the Butte Area in 1988, including residential and commercial areas of town. The Butte Area portion of the site consists of four operable units: Butte Mine Flooding, Butte Priority Soils, Butte Non-Priority Soils and Butte Active Mine Area. The high priority projects are the Butte Mine Flooding operable unit and Priority Soils.

A portion of the Priority Soils operable unit, Lower Area One which includes the Colorado Tailings, is being cleaned (removal of 1.2 million cubic yards of contaminated soils and tailings) under an expedited response action. The Butte Mine Flooding operable unit and Lower Area One present the greatest threat to the environment. The Priority Soils operable unit presents the greatest potential threat to public health. EPA has the enforcement lead on all four Butte operable units. The PRPs are conducting most of the investigations, remedial actions (e.g., soil removals) and cleanup alternative evaluations.

BUTTE PRIORITY SOILS:

The Butte Priority Soils operable unit includes residential and commercial properties of uptown Butte, Walkerville, Williamsburg and Timber Butte which may pose an imminent threat to public health or the environment. Highly contaminated residential soils were removed from Walkerville in 1987 and 1988, Timber Butte in 1989 and the Colorado Smelter in 1992. EPA completed removal of many of the contaminated "source areas" in Butte from 1990 to 1992.

In 1995, the Butte-Silver Bow government, with assistance from ARCO, EPA and DEQ, implemented the comprehensive, multifaceted Lead Abatement and Prevention Program. The program includes public education about lead poisoning and exposure abatement, monitoring of child blood-lead levels, removal of lead-contaminated indoor dust, removal of lead-contaminated yard and garden soils, and replacement or repair of

deteriorating lead-based paint and other lead exposure abatement efforts. The program will be administered by the Butte-Silver Bow County Health Department. Most of the funding will be provided by ARCO. EPA will provide funding for the portion of the program involving removal or repair of exterior lead-based paint needed to prevent recontamination of cleaned up yards.

Lower Area One includes the Colorado Tailings and Butte Reduction Works. Contaminated soils, tailings and groundwater in this area contribute about 70 percent of the contamination to Silver Bow Creek during low-flow periods. Under EPA direction, ARCO initiated construction activities and began removing contaminated materials in 1993. By 1999, when the removal of contaminated soils is complete, 1.2 million cubic yards will have been removed and placed in a secure repository. A remedial investigation/feasibility study is underway for the remainder of the Butte Priority Soils operable unit. The final record of decision is planned for 1999.

BUTTE MINE FLOODING:

The Butte Mine Flooding operable unit includes the Berkeley Pit and associated flooded mine workings. In 1982, ARCO shut off the pumps which kept water out of the mine tunnels and the Berkeley Pit. Surface and groundwater has been filling the mines and pit. If left unregulated, it eventually could contaminate alluvial groundwater in the Butte area.

The remedial investigation and feasibility study were completed in January 1994. A joint EPA/DEQ proposed plan was submitted for public comment in late January 1994. Following public comment, the record of decision was issued in September 1994. The record of decision incorporated many of the public comments on the proposed plan. Waters in the operable unit will not be allowed to rise above safe water levels (5,410 feet), thereby keeping water perpetually flowing to the Pit where it will be pumped and treated. The responsible parties and the agencies are negotiating a consent decree for implementing the remedy.

BUTTE NON-PRIORITY SOILS:

This operable unit includes vacant land north and west of uptown Butte. Although the soils are contaminated, they don't present an imminent threat to the public health at this time. The schedule for investigating this operable unit and selecting a remedy has not yet been set.

ACTIVE MINE AREA:

This operable unit includes the permitted/active mine areas of Butte. Montana Resources Inc. (MRI) is the current operator of this area. The site includes the MRI Concentrator, the Continental Pit and the Yankee Doodle Tailings Pond. Superfund activities at this operable unit will not begin until the end of active mining operations.

MAJOR CECRA (STATE) SITES

Following are nine summaries of CECRA sites (which are not on the federal Superfund list) where major investigation and/or cleanup activities have taken place. Beginning on page 47 with A & S Industries are summaries of all other CECRA sites. The site summaries describe investigation and cleanup activities which have taken place as of April 1996 and also explain upcoming scheduled activities.

For sites without scheduled future actions, DEQ may require investigation and cleanup by potentially liable persons, depending upon the site's priority and available staffing and funding resources. On CECRA sites, "potentially liable persons" (PLPs) are equivalent to "potentially responsible parties" (PRPs) on federal sites. Persons other than PLPs can voluntarily clean up sites under the CECRA voluntary cleanup program.

BITTERROOT VALLEY SANITARY LANDFILL

Bottled water provisions - 1991

Voluntary interim cleanup - 1993

Voluntary remedial investigation and feasibility study - 1992/1993

Water well replacement - 1995/1996

The Bitterroot Valley Sanitary Landfill, located south of Victor, has contamination consisting primarily of chemicals called chlorinated solvents that have migrated to groundwater downgradient of the site. In 1987, EPA conducted an initial site inspection and found on-site and downgradient groundwater contaminated with chlorinated



Soils contaminated with chlorinated solvents were excavated at the Bitterroot Valley Sanitary Landfill near Victor in 1993. A potentially liable party also began pumping and treating contaminated groundwater in 1993 and is providing affected water users with new wells in a deeper, uncontaminated aquifer.

compounds. EPA's 1991 listing site inspection confirmed this groundwater contamination.

In 1991, DEQ requested the PLPs provide bottled water to residents whose well water was suspected or known to be contaminated. DEQ requested all PLPs conduct groundwater investigations in 1992.

One of the PLPs, National Institutes of Health (NIH), has identified the extent of contaminated groundwater. The affected area covers approximately 55 acres directly east of the site. DEQ is directing well sampling and assuring safe drinking water for affected residents.

In 1993, NIH conducted an interim remedial action source removal. Approximately 100,000 cubic yards of contaminated soil was removed and treatment consisting of pumping and treating contaminated groundwater was initiated during this interim action.

DEQ conducted a health and ecological risk assessment and NIH completed a feasibility study at the site in 1995. NIH also has conducted aquifer tests and sampled a deeper aquifer to identify a safe drinking water source for residents within the area of contaminated groundwater. NIH began installing deep replacement wells at affected residences in the fall of 1995 and expects to complete the well installations by summer of 1996.

BOZEMAN SOLVENT SITE

Septic system removal and alternate water supply order - 1991

Permanent water supply order - 1993

Voluntary investigations - 1993

Sewer line replacement - 1994

Soil vapor extraction - 1995

The Bozeman Solvent site is located on the west side of Bozeman in a commercial and residential area. In 1989, DEQ discovered groundwater contaminated with chlorinated solvents. Subsequent 1989 and 1990 sampling indicated the Buttrey's Shopping Center septic system and sewer line as possible sources of contamination. Other possible sources are being investigated. In 1992, DEQ conducted a site inspection to determine the site's eligibility for the list of federal Superfund sites. This inspection further documented groundwater contamination.

In 1991, DEQ ordered the PLPs to remove the septic system and associated contaminated soil, as well as provide alternate water to well users whose water is contaminated and to sample wells quarterly. In 1992, the PLPs removed the septic system, installed a vapor extraction system to remediate contaminated soil, and provided bottled water to well users. In 1993, DEQ also ordered the PLPs to provide permanent alternate water to well users whose water is contaminated. The PLPs initiated voluntary actions to identify other possible sources and investigate the extent of groundwater contamination.

In 1994, a PLP voluntarily replaced the old sewer line. Subsequent investigations

found grossly contaminated soils remain along the old sewer line. Another vapor extraction system was installed in the fall of 1995 to remediate contaminated sewer line soils. In 1995, some citizens affected by site contamination filed a notice of intent to sue three parties under the citizens suit provisions of CERCLA and the Resource Conservation and Recovery Act (RCRA). The citizens are seeking reimbursement for the costs they incurred and continue to incur because their wells are contaminated.

DEQ is directing well sampling, remediation of contaminated sewer line soil and assurance of safe drinking water for affected residents until the site is officially ranked under the Superfund hazard ranking scoring system. In March 1996, DEQ initiated negotiations on an order to PLPs to conduct a remedial investigation and feasibility study so final site cleanup methods can be determined.

BURLINGTON NORTHERN - LIVINGSTON

Consent decree for investigation - 1989

The Burlington Northern Livingston Shop Complex is a 90-acre railyard and locomotive shop site located within the town of Livingston. Burlington Northern (BN) sold the complex to Washington Corporation in 1986 but is responsible for site cleanup. From the 1950s to the 1980s, BN used solvents in their locomotive maintenance and repair operations, and refueled locomotives at the railyard. Solvents and diesel fuel contaminated adjacent soils and groundwater. An estimated 500,000 gallons of diesel is floating on the groundwater on-site, and solvent contamination has migrated off site into municipal and private wells and into the Yellowstone River.

In 1985, DEQ requested that BN install monitoring wells to investigate potential groundwater problems.

In 1988, DEQ issued an administrative order to remove all underground storage tanks and associated piping and soils. DEQ also sampled and detected solvents in two Livingston city wells, both of which were subsequently shut down and later replaced with wells upgradient from the site.

In 1988, DEQ and BN signed a consent agreement to investigate and clean up the site. In 1989, the remedial investigation of the Livingston site began. During the investigation, several interim cleanup measures were completed, including sludge removal, soil vapor extraction, underground storage tank removal, contaminated river gravel removal and track pan installation. BN completed a remedial investigation in 1994 and will complete a feasibility study in 1996.

In 1993, BN completed excavation and off-site shipment of approximately 12,000 cubic yards of buried sludge. DEQ plans to complete the proposed plan in 1996.

COMET OIL

Administrative order on consent for remedial investigation/feasibility study - 1991

Interim sludge removal - 1994

Interim soil removal - 1995

The Comet Oil site is located in a suburb east of Billings called Lockwood. The site is situated on the Frontage Road near the Yellowstone River. In 1965, Comet Oil began re-refining used motor oil. The facility ceased re-refining operations in 1979 but stored waste oil until 1985, when all plant activity stopped. The oil was treated with acid and filtered to remove metal contaminants. The metals in the oil were the result of engine wear and leaded fuel. Acid-metals sludge and clay used for filtering were disposed of in unlined pits on the property. Wastewater was also disposed of in unlined pits at the site. During operation, oil was spilled at the site.

In 1985, suspected vandalism resulted in the spillage of 80,000 to 100,000 gallons of used oil, much of which was recovered. Petroleum hydrocarbons and related compounds have contaminated soils and groundwater.

In 1994, the acid sludge and filter clay pits and associated contaminated soils were excavated, stabilized with high lime fly ash and disposed of at a Class II landfill.

In 1995, a removal action resulted in the excavation of a portion of the old waste water pits and disposal of the most heavily contaminated soils at an appropriate landfill. Remaining pit soils are currently being landfarmed to biologically treat contaminants. Treatment is anticipated to be required until 1999.

The PLP, Mountain States Petroleum, is currently conducting a remedial investigation/feasibility study which is expected to be completed in 1996.

KALISPELL POLE & TIMBER

Kalispell Pole & Timber is a 15-acre wood-treating facility which operated from approximately 1973 to 1990. A mixture of pentachlorophenol and diesel was used for wood treatment. Spills and probably one or more leaks in the treatment vat area led to contamination of soils and groundwater both on- and off-site by petroleum constituents, pentachlorophenol and associated dioxins and furans. In addition, drippings from drying poles contaminated surface soil with the same constituents. DEQ is currently overseeing investigation and cleanup work at this facility.

The facility is located approximately 200 feet south of the Stillwater River and about 50 feet from the nearest residences, although the areas of heavy contamination are approximately 400 feet from the residences. Portions of the facility are fenced; however, one or more lumber companies apparently used contaminated areas for a number of years

before the areas were fenced.

Some nearby residences use wells tapping into deeper aquifers for their domestic water supplies. Most of the area is on the Evergreen municipal water supply which has two wells located approximately 1,000 feet northeast of the site. Two other CECRA sites are nearby: the inactive Reliance Refinery site immediately to the east, and the inactive Yale Oil site immediately southeast of the Reliance site.

DEQ and EPA conducted various investigations between 1985 and 1991 that indicated high levels of pentachlorophenol, petroleum, and dioxin/furan compounds in on-site soils and groundwater, off-site migration of groundwater contamination to the east/southeast, and no contamination of nearby Evergreen municipal wells. Contamination was detected in two nearby residential wells in 1991, but subsequent semi-annual sampling through 1995 did not indicate any contamination of downgradient residential wells. A 1994 investigation by Burlington Northern confirmed the results of previous investigations and included replacing damaged monitoring wells.

In 1995, DEQ identified BN, Montana Mokko and Kalispell Pole and Timber as PLPs at this site. DEQ is currently working with BN to plan future investigation and cleanup work at the site.

EPA has developed a hazard ranking score for the combined Kalispell Pole & Timber and Reliance Refinery sites but is still determining whether the sites should be placed on the National Priorities List of federal sites. DEQ conducts semi-annual well sampling in the vicinity of the Kalispell Pole & Timber and Reliance Refinery sites.

MISSION WYE

Consent decree for investigation - 1989

Mission Wye is a seven-acre site approximately five miles east of Livingston where BN disposed wastes from oil re-refining and other railyard activities. Contamination consists of solvents, sludges, debris and heavy metals and extends to nearby soils and groundwater.

In 1988, DEQ and BN signed a consent decree requiring BN to complete a remedial investigation. In 1990, DEQ approved a comprehensive work plan to determine the extent of the contamination. Investigative work by BN contractors included sampling of the surface and buried waste materials, surface soil, soil beneath the pit areas and groundwater.

In 1993, BN performed a treatability study to test three technologies to treat waste material, as agreed upon with DEQ.

In 1995, DEQ completed the Interim Action Memorandum which selected excavation, thermal desorption and soil vapor extraction to clean up the site. Preparatory work for cleanup began in late 1995; cleanup is scheduled for 1996.

MISSOULA WHITE PINE SASH

Remedial investigation and feasibility study order - 1995

Missoula White Pine Sash is an active sawmill and wood products manufacturer located on Missoula's north side in a commercial and residential area. Missoula White Pine Sash Company treated wood with pentachlorophenol mixed with petroleum carriers from the late 1930s until 1987.

In 1989, an underground storage tank was discovered at the site. During removal of the tank, soil contaminated with low levels of pentachlorophenol was discovered. In 1992, another underground storage tank was discovered, and during its removal, soil and groundwater contaminated with pentachlorophenol, dioxins and furans, and petroleum hydrocarbons were discovered. During 1993 and 1994, the Montana Department of Agriculture, acting as lead agency, requested a remedial investigation at the site. The site was added to the CECRA list in June 1994.

In December 1994, DEQ took over as lead agency for the site and issued a notice letter to Missoula White Pine Sash requesting interim actions. In March 1995, DEQ ordered the company to conduct a remedial investigation and a feasibility study. A preliminary assessment completed by the federal Superfund program in March 1995 indicated the site should be further evaluated for its potential to become a federal Superfund site. DEQ initiated the formation of a community advisory committee to provide a forum for public dialogue on the site.

The remedial investigation began in June 1995 and is in progress. A data summary report is being developed, and Phase II of the remedial investigation will be planned in early 1996. DEQ will produce a risk assessment work plan for public comment in 1996.

RELiance REFINERY

The Reliance Refinery, located in the Evergreen area east of Kalispell, is an inactive, 10-acre oil refinery which operated from 1924 to the 1960s. On-site disposal of sludge and leakage of sludge and oil from above-ground storage tanks resulted in soil contamination with petroleum hydrocarbons and some metals, notably lead. Groundwater under the site is contaminated with petroleum hydrocarbons, pentachlorophenol and polynuclear aromatic hydrocarbons, the source of which may be the adjacent Kalispell Pole & Timber site.

In 1988, the EPA Emergency Response Branch constructed a security fence around the site and posted hazard warning signs following reports of children playing in the sludge pits. Also in 1988, a CERCLA Phase I site investigation by DEQ consultants found high levels of petroleum constituents, metals and polynuclear aromatic hydrocarbons, and low levels of dioxins in soils at the site. Pentachlorophenol was found in one soil sample and in groundwater samples.



Sludge pits at the old Reliance Refinery in Kalispell were fenced after DEQ received reports of children playing in them. DEQ is conducting groundwater monitoring in the vicinity of the refinery and the adjacent Kalispell Pole and Timber site while exploring long-term cleanup options for both sites.

In 1989, a CERCLA Phase II site investigation by DEQ consultants suggested that groundwater contamination may be migrating off site. In 1994, DEQ consultants removed barrels of contaminated purge water and drill cuttings from site investigations which had been stored inside the fence.

EPA has developed a hazard ranking score for the combined Reliance Refinery and Kalispell Pole & Timber sites but is still determining whether the sites should be placed on the National Priorities List of federal sites. DEQ conducts semi-annual domestic well sampling in the vicinity of the Reliance Refinery and Kalispell Pole & Timber sites.

UPPER BLACKFOOT MINING COMPLEX

Voluntary cleanup initiated - 1993

The Upper Blackfoot Mining Complex, located 15 miles east of Lincoln in the headwaters of the Blackfoot River, is an inactive mining area which operated intermittently from 1889 to the 1950s. Mineral exploration occurred intermittently from the 1950s to the present. Tailings, waste rock dumps and acid drainage from old adits have contaminated surface water, sediments, groundwater and soils. In 1975, failure of a tailings impoundment located on Beartrap Creek washed metal-laden sediments into the upper Blackfoot River.

In 1991, the Montana Legislature transferred cleanup oversight from the Abandoned

Mine Reclamation Bureau to the DEQ-CECRA program. DEQ identified and notified ASARCO and ARCO as PLPs for the site. ASARCO and ARCO began site investigations in 1992 and a five-year voluntary interim remedial action program in 1993. The overall cleanup approach involves: 1) revegetation and/or removal and encapsulation of mine wastes and tailings, and 2) treatment of acid mine drainage from the Anaconda and Mike Horse mine adits in a passive wetlands system, which includes a pretreatment pond. The pretreatment pond serves to precipitate iron and associated metals before the Mike Horse adit water enters the wetlands system.

In 1993, contractors for the PLPs began construction of the treatability pond at the Mike Horse mine. They excavated 15,400 cubic yards of mine waste and tailings from the

Upper Blackfoot: before and after

The Lower Carbonate Tailings, a portion of the Upper Blackfoot Mining Complex, were a familiar eyesore to travelers on Highway 200 between Lincoln and Rogers Pass. Swamp Creek flowed through the tailings, carrying acidic water and metals into the nearby Blackfoot River. In 1993, potentially liable parties removed the tailings, treated them with lime and placed them in a repository at the Upper Carbonate mine area. Grading and revegetation have restored the Swamp Creek drainage in this area.



Lower Carbonate area, treated it with lime, and consolidated it with Upper Carbonate mine wastes in a repository.

In 1994, the Lower Carbonate removal area was reclaimed as a wetland and the Upper Carbonate repository cap was completed. Approximately 7,300 cubic yards of mine waste and tailings were removed from the Lower Anaconda mine area and relocated to the Mike Horse mine site.

In 1995, an additional 13,000 cubic yards of mine waste was removed from the Upper and Lower Anaconda mine site. Wetland cells, which will receive water from the treatability pond starting in 1996, were constructed at the Lower Anaconda mine site. Alkaline limestone drains to raise the pH of the adit waters were installed at the Mike Horse and Anaconda mine adits. New monitoring wells were installed at the Anaconda, Carbonate and Mike Horse mine sites.

Future remediation activities will include completion of the treatability pond/constructed wetlands treatment system, removal of mine wastes and treatment of acid drainage from the Paymaster mine, remediation of the Tunnel #3 area and revegetation of the upper Mike Horse mine area.

OTHER CECRA (STATE) SITES

(DEQ-CECRA is the lead regulatory program for the site unless otherwise noted.)

A&S INDUSTRIES IN POPLAR

is an active manufacturing plant that has operated intermittently in recent years. Apparently no sampling data or other documentation exist to indicate whether on-site contamination has occurred. The Assiniboine and Sioux Tribes and/or the EPA are the lead regulatory authorities for the site.

A.J.'s LAUNDRY AND LINEN IN MISSOULA

is an inactive, 1/4-acre laundry and dry-cleaning facility that operated from 1979 to 1993. Investigations conducted in 1993 and 1995 indicated on-site soil contamination with solvent and petroleum compounds but no groundwater contamination. The DEQ Hazardous Waste program completed an enforcement action in 1996; DEQ-CECRA is now the lead program and is analyzing a petition to declare the site "no further action" after independent cleanup activities were conducted in 1995.

AGENCY DUMP SOUTHWEST OF AGENCY

is an inactive, 10-acre abandoned landfill that operated from 1937 to 1987. A 1991 soil sampling event did not indicate significant contamination; however, the sampling was limited. Work may continue because the dump site overlaps with another site, Flathead Post & Pole. The Confederated Salish and Kootenai Tribes is the lead agency for the site.

ALICE CREEK POST AND POLE NORTHWEST OF LINCOLN

is an inactive, smaller than one acre wood-treating facility that operated from 1985 to 1986. In 1988, during a site inspection, DEQ and the Montana Department of Agriculture (MDA) found an abandoned storage tank and open dip vat containing a pentachlorophenol mixture. In 1989, the PLP removed the equipment and sludges under MDA oversight. The possibility of soil and surface water contamination needs to be evaluated.

ALL AMERICAN BUMPER AND PLATING IN MISSOULA

is an active, 1/2-acre powder coating facility that has operated since 1979. Investigations and sampling events between 1987 and 1994 found elevated levels of solvent contamination in surface and near-surface soils. In 1994 and 1995, the PLP removed a septic tank and conducted necessary sampling under the oversight of Missoula City/County Health Department, which has declared the site "no further action."

AMERICAN DENTAL IN MISSOULA

is an inactive, 1 1/3-acre dental-plating facility that operated from 1974 to 1991. A

1993 site investigation found high levels of cyanide and metals in soils underneath the plating tank, elevated levels of solvents and metals in a dry well, and elevated metal levels in the groundwater. In 1994, the site owner started a voluntary remedial action with DEQ oversight. In 1995, DEQ declared the site "no further action."

ANACONDA ALUMINUM COMPANY IN COLUMBIA FALLS

is an active, 120-acre aluminum smelter that has been in operation since 1955. A 1988 site investigation indicated high levels of petroleum compounds in on-site soil, surface water and sediments of the percolation ponds. Some on-site soils also showed high levels of cyanide and metals. Contaminated soils from a 1991 PCB spill were shipped to a hazardous waste disposal facility, and the smelter continues to monitor groundwater wells under DEQ Water Quality Division and Hazardous Waste Program oversight.

ANACONDA MINERALS COMPANY IN BLACK EAGLE

is an inactive, 250-acre metals smelter and refinery complex that operated from 1893 to 1980. Investigations in 1983 documented heavy metals contamination of on- and off-site surface water and on-site groundwater. After completing groundwater studies, the PLP conducted some remedial actions to prevent runoff of contaminated surface water.

APEX MILL IN BANNACK

is an inactive, 6- to 10-acre gold mine and mill site that operated from 1915 to 1970. In 1983, sampling found high levels of arsenic and elevated levels of cyanide, lead and caustic materials inside the mill building and in the tailings pond. In 1989, contractors for DEQ vacuumed tailings out of the mill building, removed barrels of hazardous substances and constructed a diversion ditch around the tailings pond. The DEQ Abandoned Mine Reclamation Bureau will address the tailings pond.

ARRO OIL REFINERY NORTHWEST OF LEWISTOWN

is an inactive, 37-acre refinery that operated from 1921 to 1942. In 1989, a remedial investigation identified sludge pits, lead and petroleum contaminated soils and petroleum contaminated groundwater. In 1991 and 1992, DEQ conducted a cleanup of lead-contaminated soils. In 1993, DEQ conducted a cleanup of the sludge pits.

ASARCO INCORPORATED SOUTH OF TROY

is an active, 50-plus-acre copper and silver mine that has operated since 1981. Large tailings piles and ponds are located near Lake Creek. In 1984, a preliminary assessment noted the potential for contamination of the creek by the tailings. The site is regulated by the DEQ Hard Rock Bureau under an active mine permit.

BASIN MINING SITE (BASIN SCHOOLYARD) IN BASIN

is an inactive, 100-acre mine and mill site that operated from 1892 until the 1950s. Investigations and sampling between 1989 and 1991 found metal contamination in mill tailings, Basin schoolyard soils, residential yards and Boulder River sediments. EPA is evaluating the site's federal Superfund status.

BASS CREEK POST & POLE PLANT NEAR STEVENSVILLE

is an inactive wood treating facility of unknown size that operated sometime between 1948 and 1978. Visits to the site found no visible evidence of contamination, but soil sampling or additional site history may be necessary for the site to be declared "no further action."

BEAVER WOOD PRODUCTS EAST OF COLUMBIA FALLS

is an active, five-acre wood-treating facility that began operations in 1950. Investigations in 1984, 1988 and 1990 found high levels of wood-treating compounds in on-site soils and sludges. In 1991, EPA issued a unilateral order requiring the site owner to fence the site and place a gravel cap on contaminated soils to reduce airborne dust.

BEAVERHEAD NATIONAL FOREST (ELKHORN MINE & MILL) SOUTH OF WISE RIVER

is an inactive, 50-acre gold, silver, copper and lead mine and mill site that operated between 1872 and 1964. 1991 and 1993 investigations indicated on-site waste piles, acid mine drainage and contamination of Elkhorn Creek to be major problems. The site is being evaluated for its federal Superfund status. The USDA Forest Service is the lead agency for the site.

BELLE CREEK BARREL SITE SOUTHEAST OF BROADUS

is an inactive, five-acre gas plant that operated until 1975. In 1992, site owners conducted sampling and removal activities, including the disposal of liquid hazardous wastes, the excavation and treatment of petroleum-contaminated soils and the disposal of debris. The DEQ Water Quality Division provided oversight of site activities.

BELT CREEK CCC CAMP NORTH OF NEIHART

is an inactive, one-acre wood-treating site that operated between 1934 and 1942. A 1994 site inspection and sampling event found no evidence of contamination. The facility is designated "no further action."

BERG POST AND POLE IN LEWISTOWN

is an inactive, two-acre wood-treating facility that operated from 1968 to 1975. Site investigations in 1988 and 1991 indicated on-site soil contaminated with wood-treating compounds. In 1996, DEQ sent notice letters to PLPs and will pursue action at the site.

BIG HOLE POST PLANT IN ARGENTA

is an inactive, three-acre wood-treating facility that operated from 1970 to 1988. Additional research and investigations are needed to determine if the site needs any remediation.

BIG HORN OIL & REFINING COMPANY IN BILLINGS

is an inactive, one-acre oil refinery that operated from 1930 to 1937. The plant was apparently dismantled in 1954. Additional research and investigations are needed to determine if the site requires any remediation.

BIG WEST OIL SOUTHEAST OF KEVIN

is an inactive, 80-acre petroleum refinery that operated from 1925 to 1977. Investigations from 1980 through 1994 found petroleum contamination in ponds and waste water pits. Asbestos was also present in some of the structures. In 1989 and 1995, PLPs fenced portions of the site to limit access to sludge pits. DEQ is currently preparing a risk assessment to determine cleanup levels. PLPs are drafting a feasibility study.

BILLINGS GRAIN TERMINAL IN BILLINGS

is an active, 6¹/₂-acre grain terminal in operation since 1909. Investigations in 1990 and 1991 found on-site soil contaminated with pesticides and on-site groundwater contaminated with solvents. The solvent contamination may be attributable to other sources. The site is the subject of a private lawsuit concerning the entities responsible for contamination and cleanup.

BILLINGS PCE GROUNDWATER IN BILLINGS

is a 500-acre, multi-source plume of groundwater contamination. Several groundwater studies conducted in 1991 and 1992 discovered solvents in area groundwater. Additional investigations are needed to define the plume and determine the sources.

BILLINGS SANITARY LANDFILL SOUTHWEST OF BILLINGS

is an active, 572-acre municipal landfill that has operated since 1969. A 1988 investigation found possible on-site soil contamination with polynuclear aromatic hydrocarbons and pesticides. Because the landfill is a permitted facility, any contamination problems will be addressed by the DEQ Solid Waste Program.

BLACKFEET PENCIL FACTORY SOUTH OF BROWNING

is an active pencil factory on tribal lands. Workers repairing a water service line in 1989 discovered solvent contamination in soils. EPA removed and treated contaminated soils in 1990, replaced the water service line and installed a soil venting system. EPA and

the Blackfeet Tribe are the lead regulatory agencies.

BLACKFEET POST AND POLE SOUTH OF BROWNING

is an inactive, two-acre wood treating facility that operated intermittently between 1978 to 1989. A 1990 CERCLA preliminary assessment documented wood-treating compounds in soils. In 1991, the EPA Emergency Response Branch conducted a cleanup action involving on-site incineration of contaminated soils and liquids. The Blackfeet Tribe and/or the EPA are the lead regulatory authorities for the site.

BOHRMAN'S EXXON IN ENNIS

is an inactive, 1/3-acre gasoline service station that operated from 1947 to 1987. Investigations between 1990 and 1992 found elevated levels of metals in on-site soils and petroleum hydrocarbons and chlorinated solvents in soils and groundwater. A PLP removed some contaminated soils and fenced the area in 1993. More groundwater sampling is needed before the site can be declared "no further action."

BONNEVILLE POWER ADMINISTRATION SOUTHEAST OF HOT SPRINGS

is an active, 61-acre electrical power substation that has operated since the 1950s. Investigations between 1988 and 1990 found solvent contamination in an on-site water supply well, but the contamination apparently has not migrated off site. The EPA-RCRA Program and the Bonneville Power Administration are the lead regulatory agencies for the site.

BOOTLEGGER TRAIL NORTH OF BLACK EAGLE

is an inactive, one-acre site that consisted of approximately 500 abandoned military surplus barrels. A 1989 investigation found the barrels contained petroleum compounds which had leaked onto surface soils. In 1995, the U.S. Air Force, under DEQ oversight, removed all the barrels and contaminated soils. DEQ declared the site "no further action."

BORDEN INC. IN MISSOULA

is an active, 10-acre glue and resin manufacturing plant that has operated since 1970. A 1987-88 investigation found no contaminants in the groundwater monitoring wells. Borden removed all accumulated hazardous wastes from on-site lagoons, and DEQ declared the site "no further action."

BOULDER RIVER RAILROAD WEST OF BOULDER

is an abandoned, five-acre railroad fill constructed of mine tailings. A 1993 site inspection determined the tailings contain elevated levels of metals.



Bootlegger Trail site near Great Falls

Five hundred barrels (above) containing petroleum compounds were abandoned at the Bootlegger Trail site north of the Black Eagle community near Great Falls. In 1995, the U.S. Air Force, with DEQ oversight, removed the barrels and the associated contaminated soils. The photo below shows the site following cleanup.



BOZEMAN OLD CITY LANDFILL

is an inactive, 30-acre municipal landfill that operated from 1962 to 1970. Investigations and sampling from 1983 to 1991 found no significant contamination. DEQ recommended continued groundwater and lake sampling.

BUREAU OF LAND MANAGEMENT ILLEGAL AIRSTRIP SOUTH OF FLATWILLOW

is an inactive, five-acre airstrip that was illegally constructed on U.S. Bureau of Land Management (BLM) land in 1984 and closed in 1985 when BLM discovered the airstrip and pesticides drums located on-site. The airstrip operator removed the drums and re-seeded the site in 1986. DEQ has designated the site "no further action."

BUREAU OF LAND MANAGEMENT STEAMBOAT POINT SOUTH OF LOMA

is an inactive, four-acre town landfill that operated from 1966 to 1980. Sampling may be warranted to ensure the facility is not releasing contaminants to the environment. The U.S. Bureau of Land Management is the lead agency for the site.

BURLINGTON NORTHERN DERAILMENT SOUTHEAST OF BAINVILLE

is the location of a 1980 freight train derailment that caused a pesticide spill. Burlington Northern deposited pesticide-contaminated soils into a lined pit on Burlington Northern property. Follow-up inspection of the pesticide disposal area may be warranted.

BURLINGTON NORTHERN DERAILMENT EAST OF BRIDGER

is the location of a 1974 freight train derailment that caused a phenol spill. Additional information or investigation is needed to determine if any contamination remains at the site.

BURLINGTON NORTHERN DERAILMENT NORTH OF EVARO

is the location of a 1978 freight train derailment that caused an acid and asphalt spill into Finley Creek, killing all the fish in the three miles of creek below the site. Burlington Northern neutralized the acid and cleaned up the spilled materials. DEQ has designated the site "no further action."

BURLINGTON NORTHERN DERAILMENT IN GARRISON

is the location of a 1978 freight train derailment that caused a 1,500-gallon chemical spill. A 1994 site inspection found no evidence of contamination. DEQ has designated the site "no further action."

BURLINGTON NORTHERN DERAILMENT IN HELENA

is the location of a 1989 freight train derailment, explosion and fire that leaked isopropyl alcohol, hydrogen peroxide and petroleum compounds. Contractors for the site operator excavated and thermally treated or landfarmed contaminated soils. DEQ has declared the site "no further action."

BURLINGTON NORTHERN DERAILMENT IN MISSOULA

is the location of a 1977 freight train derailment that caused a chemical spill. A 1994

site inspection found no evidence of contamination, and DEQ has declared the site "no further action."

BURLINGTON NORTHERN DERAILMENT IN WHITEFISH

is the location of a 1989 freight train derailment that caused a release of petroleum compounds into Whitefish Lake. A 1989 sampling event found residential water supplies did not have significant levels of contamination. The DEQ Water Quality Division continues to monitor this site.

BURLINGTON NORTHERN FUELING FACILITY IN BILLINGS

is an inactive, 20-acre locomotive fueling and maintenance facility that operated from the 1940s through the 1970s. Investigations in the 1980s documented soils and groundwater contamination with petroleum compounds. A 1991 investigation found solvent contamination upgradient of the site, indicating a different probable source. DEQ and BN are negotiating a consent agreement to address 13 BN fueling facilities.

BURLINGTON NORTHERN FUELING FACILITY IN BUTTE

is an active, 20-acre locomotive fueling facility that has operated since the 1940s. A 1988 investigation found low levels of petroleum compounds, associated organic compounds and a petroleum odor in soils. DEQ and Burlington Northern are negotiating a consent agreement to address 13 BN fueling facilities.

BURLINGTON NORTHERN FUELING FACILITY IN ESSEX

is an active, two-acre railroad fueling facility and former railroad maintenance facility. Investigations and sampling events from 1988 to 1992 found low levels of petroleum and other organic compounds in on-site soils and high levels of metals in on-site groundwater. DEQ and Burlington Northern are negotiating a consent agreement to address 13 BN fueling facilities.

BURLINGTON NORTHERN FUELING FACILITY IN GLASGOW

is an active, 1½-acre railroad fueling facility and former railroad maintenance facility. A 1987 site investigation found a stained soil layer and low petroleum compound levels in soils. DEQ and Burlington Northern are negotiating a consent agreement to address 13 BN fueling facilities.

BURLINGTON NORTHERN FUELING FACILITY IN GLENDIVE

is an active, 20-acre locomotive fueling and repair facility that has operated since the 1940s. In 1989, Burlington Northern began recovering free product (diesel) from groundwater. DEQ and Burlington Northern are negotiating a consent agreement to address 13 BN fueling facilities.

BURLINGTON NORTHERN FUELING FACILITY IN GREAT FALLS

is an active, 21-acre locomotive fueling facility that began operations in 1948. Investigations in 1985 through 1987 found three small plumes of diesel contamination. Burlington Northern has an on-going free product recovery system which was upgraded in 1995. DEQ and Burlington Northern are negotiating a consent agreement to address 13 BN fueling facilities.

BURLINGTON NORTHERN FUELING FACILITY IN HAVRE

is an active, six-acre locomotive fueling facility that has operated since 1944. Investigations in the 1980s and 1990s have delineated large pools of free diesel fuel on the groundwater. Burlington Northern augmented the free product recovery system in 1995 and conducted remedial actions to prevent migration of contamination in the city sewer. DEQ and Burlington Northern are negotiating a consent agreement to address 13 BN fueling facilities.

BURLINGTON NORTHERN FUELING FACILITY IN HELENA

is an active, two-acre locomotive fueling facility that has operated since the 1950s. Investigations from 1981 to 1986 found a plume of diesel contamination extending off site. DEQ and Burlington Northern are negotiating a consent agreement to address 13 BN fueling facilities.

BURLINGTON NORTHERN FUELING FACILITY AT JONES JCT. EAST OF HUNTLEY

is an inactive, smaller than one acre, temporary railroad fueling facility. A site investigation in 1987 found minor petroleum contamination in soils. DEQ and Burlington Northern are negotiating a consent agreement to address 13 BN fueling facilities.

BURLINGTON NORTHERN FUELING FACILITY IN LAUREL

is an active, 285-acre locomotive fueling facility and former repair facility that has operated since the 1940s. Investigations between 1987 and 1993 found on-site soils heavily contaminated with petroleum compounds and metals and on-site groundwater contaminated with diesel, petroleum compounds, metals and solvents. Burlington Northern is conducting limited free product recovery. DEQ and Burlington Northern are negotiating a consent agreement to address 13 BN fueling facilities.

BURLINGTON NORTHERN FUELING FACILITY IN MISSOULA

is an active, eight-acre locomotive fueling facility that began operations in 1947. Investigations from 1985 through 1993 found a plume of diesel and solvent contamination which extends off site. Since then, Burlington Northern has been conducting further investigations and free product recovery. EPA is evaluating the potential for the site to be

a federal Superfund site. DEQ and Burlington Northern are negotiating a consent agreement to address 13 BN fueling facilities.

BURLINGTON NORTHERN FUELING FACILITY IN SHELBY

is an inactive, two-acre railroad fueling facility that operated from the late 1940s to 1985. A 1987 site investigation found minor soil contamination with petroleum compounds and polynuclear aromatic hydrocarbons. DEQ and Burlington Northern are negotiating a consent agreement to address 13 BN fueling facilities.

BURLINGTON NORTHERN FUELING FACILITY IN WHITEFISH

is an active, 30-acre locomotive fueling and repair facility that has operated since the 1940s. Investigations from 1987 through 1989 found free product floating on the water table, low levels of polynuclear aromatic hydrocarbons and metals in groundwater, high levels of petroleum compounds in soils, and contamination of Whitefish River sediments by petroleum compounds. Burlington Northern has an on-going free product recovery system. DEQ and Burlington Northern are negotiating a consent agreement to address 13 BN fueling facilities.

BURLINGTON NORTHERN KREZELAK POND EAST OF HAVRE

is an inactive, one-acre former disposal site for railroad cleaning wastes. Investigations from 1984 through 1995 found petroleum compounds in soils from seeps. MDEQ will address the site after higher priority sites have been addressed.

BURLINGTON NORTHERN PARADISE TIE TREATMENT NORTHEAST OF PARADISE

is an inactive, 150-acre tie treating plant that operated from 1908 to 1982. On-site sludge, soil and groundwater are contaminated with wood-treating compounds, polynuclear aromatic hydrocarbons, petroleum compounds and metals. Burlington Northern is conducting remediation and quarterly groundwater monitoring, and the DEQ Hazardous Waste Program is providing oversight.

BURLINGTON NORTHERN RACETRACK POND EAST OF HAVRE

is an inactive, two-acre former disposal site for railroad cleaning wastes. Buried wastes have the potential to contaminate groundwater, so DEQ will address the site after higher priority sites have been addressed.

BUSBY CIVILIAN CONSERVATION CORPS CAMP SOUTH OF BUSBY

is an inactive, four-acre camp that operated in the 1930s. Pesticides and explosive materials were reportedly stored on-site; however, an investigation in 1990 found no evidence of contamination. Soil samples may be needed to ensure no contamination remains.

The Northern Cheyenne Tribe and/or Bureau of Indian Affairs are the lead agencies for the site.

BUTANA SPEEDWAY IN BUTTE

is an inactive, seven-acre racetrack that operated in the 1960s and 1970s. A 1993 inspection and sampling event found soils contaminated with polychlorinated biphenyls and petroleum compounds.

BUTTE-SILVER BOW COUNTY LANDFILL SOUTHWEST OF BUTTE

is an inactive, 100-acre municipal landfill that operated from 1968 to 1991. The landfill is currently undergoing closure procedures which will address groundwater contamination and tailings material under the oversight of the DEQ Solid Waste Program.

CAMAS CREEK OIL SPILL SOUTHEAST OF HOT SPRINGS

is the site of a 1992 oil spill from a ruptured pipeline. A 1993 sampling event found moderate levels of petroleum compounds in stream sediments one mile below the spill location. Continuing cleanup efforts are being overseen by the Confederated Salish and Kootenai Tribes.

CARPENTER AND SNOW CREEK MINING COMPLEX NORTHEAST OF NEIHART

is an inactive, 64-acre mining-milling complex that operated from 1897 to 1950. Investigations from 1973 to 1990 found elevated concentrations of metals in water below Carpenter Creek and in waste rock and tailings. EPA is currently assessing the site's potential for inclusion on the National Priorities List. The DEQ Abandoned Mine Reclamation Bureau will evaluate cleanup options in 1996.

CARTER OIL REFINERY WEST OF CUT BANK

is an abandoned, 250-acre oil refinery that operated from 1943 to 1951. Investigations in 1985 and 1993 found leaking barrels of tar product and on-site soil contamination from petroleum compounds. In 1996, DEQ sent notice letters to PLPs and will pursue action at the site.

CENTRAL POST & TREATING PLANT NORTHEAST OF LEWISTOWN

is an inactive, three-acre wood-treating facility that operated from 1968 to 1973. Site visits in 1989 and 1991 found no visible contamination. However, sampling is necessary to determine whether the site can be declared "no further action."

CHANDELLE LANE BARREL SITE IN BLACK EAGLE

is an inactive, smaller than one acre, barrel site discovered by the Air Force in 1995. In 1996, DEQ plans to issue notice letters requiring barrel removal and soil cleanup.

CHARLES M. RUSSELL REFUGE NORTHEAST OF ROY

is the site of a 1978 pesticides burial. A 1985 investigation yielded no information on, nor the location of, the burial trench. DEQ recommended the U.S. Fish and Wildlife Service monitor the wetland, river and artesian spring for contamination.

CHEVRON USA INC. BROWNING BULK PLANT (HOYT DISTRIBUTING) IN BROWNING

is an active petroleum bulk distributing plant. More information is needed to determine what the site status should be.

CLYDE PARK ASBESTOS SOUTH OF CLYDE PARK

is an inactive, $\frac{2}{3}$ -acre section of railroad track along which asbestos-containing materials were dumped from 1949 to 1951. Investigations from 1990 to 1992 indicated the presence of asbestos-containing materials. In 1991, the PLPs conducted interim measures to control access and prevent the asbestos from becoming airborne. The PLPs completed a voluntary cleanup in 1994. MDEQ has declared the site "no further action."

CMC ASBESTOS IN BOZEMAN

is an inactive, 11-acre asbestos ore loading depot that operated from 1953 to 1973 and the site of a salvage/recycling business that operated from 1965 to 1988. Investigations from 1990 to 1994 found asbestos, petroleum compounds and metal contamination in on-site soils. A PLP conducted an asbestos abatement action on the depot building in 1992 and plans to conduct a final voluntary site cleanup in the near future.

CMC ASBESTOS NORTH OF GALLATIN GATEWAY

is an inactive, 38-acre railroad facility that operated between 1927 and 1978. Investigations from 1990 to 1994 identified asbestos in a large pile of ore and on-site soils. In 1992 and 1995, the PLP removed ore and contaminated soil, and DEQ declared the site "no further action."

COFFMAN LUMBER & TREATING COMPANY IN BILLINGS

is an inactive, three-acre wood-treating facility. Investigations in 1991 determined the presence of wood-treating compound contamination in onsite soils. Groundwater does not appear to be contaminated.

COMET MINE - HIGH ORE CREEK NORTHEAST OF BASIN

is an inactive, 50-acre mining district that operated intermittently from 1880 until 1941. In 1991, the Montana Fish, Wildlife & Parks Department diverted High Ore Creek around metal-laden mine tailings. The DEQ Abandoned Mine Reclamation Bureau is currently evaluating site contamination and cleanup options.

CONOCO BILLINGS REFINERY IN BILLINGS

is an active, 150-acre oil refinery that has operated since 1949. In 1990, Conoco entered a consent agreement with EPA to perform a facility-wide site investigation that is on-going. EPA and the DEQ Hazardous Waste Program are the lead regulatory agencies for the site.

CONOCO LANDFARM NORTH OF BILLINGS

is an active, 20-acre land treatment unit that has operated since 1973. A 1984 site assessment indicated little potential for environmental or health hazards at the site. The DEQ Hazardous Waste Program regulates the site. DEQ-CECRA has declared it "no further action."

CONRAD REFINING COMPANY SOUTH OF CONRAD

is an inactive, nine-acre oil refinery that operated from 1929 to 1941. Investigations in 1988 found tar boils and seeps, slightly elevated lead and low levels of polynuclear aromatic hydrocarbons in sludges.

CONTINENTAL OIL COMPANY SOUTH OF LEWISTOWN

is an inactive, 21-acre refinery that operated from 1921 to 1944. Investigations between 1991 and 1994 found petroleum contamination in soils and groundwater. The PLP is conducting a remedial investigation with DEQ oversight.

CORBIN FLATS WEST OF JEFFERSON CITY

is an inactive, 60-acre mill tailings disposal site where disposal occurred from 1884 to 1941. Investigations between 1985 and 1993 indicated elevated levels of metals in on-site soils, tailings, groundwater, surface water and sediments. In 1995, the PLP completed an investigation at the site and submitted a voluntary cleanup plan for DEQ review. The plan is being revised because DEQ determined it was incomplete.

CRESTON POST & POLE YARD EAST OF CRESTON

is an inactive, 10-acre wood-treating facility that operated from 1957 to 1992. Investigations between 1988 and 1991 found wood treating compounds in groundwater and on-site soils. In 1992, the PLP conducted measures to control site access and runoff. Further investigation and PLP research is planned for 1996.

DAVIS POST YARD IN WILLOW CREEK

is an inactive, one-acre wood-treating facility that operated from the 1950s to the 1960s. A 1991 investigation found liquid in a treating tank and soils around the tank to be contaminated with wood-treating compounds. In 1992, property owners fenced the site and covered the tank.

DEPARTMENT OF ARMY - AMSA #5 IN BILLINGS

is an active, smaller than one acre, Army Reserve facility. Possible waste disposal activities may have caused petroleum or solvent contamination. However, no sampling events or investigations have been conducted.

DEPARTMENT OF ENERGY MSE TEST FACILITY IN BUTTE

is an active, 30-acre research facility for the Department of Energy. DEQ knows of no significant problems or contamination at this site. The DEQ Hazardous Waste Program is the lead regulatory agency for the active facility. DEQ-CECRA has declared the site "no further action."

DEVELOPMENTAL TECHNOLOGY IN BOZEMAN

is an inactive, 1/4-acre electroplating facility that ceased operations in 1976. In 1977, the new lessee removed all hazardous wastes from the facility. Additional site history and sampling may be needed before the site can be declared "no further action."

DIAMOND ASPHALT COMPANY NEAR CHINOOK

is an inactive, 10- to 20-acre refinery and asphalt roofing plant that operated from 1936 to 1972. Investigations in 1985 found petroleum contaminated soils at the site, with contamination reaching the groundwater in some areas. In 1995, DEQ sent notice letters to several PLPs and required fencing of portions of the site.

DIXON/PERMA DUMP WEST OF DIXON

is an inactive, two-acre dump that was in use as early as the 1920s and ceased activities by 1989. Organic chemical, pesticide and acid containers were disposed of in the dump. It is not known if the containers were empty at the time of disposal. The Confederated Salish and Kootenai Tribes is the lead regulatory agency for this site.

DOWELL SCHLUMBERGER IN GLENDIVE

is an inactive, one-acre oil field service facility that operated from 1953 to 1982. Solvents and petroleum compounds have been found in soils and shallow groundwater. Some groundwater contamination may be attributed to an upgradient source. The facility owner removed three underground storage tanks, sludge, an oil/water separator, contaminated soil and sumps. Recovery of petroleum product from groundwater is on-going.

EAST OF EDEN BARREL SITE NEAR EDEN

is the former storage/disposal site of more than 1,500 barrels containing a variety of toxic chemical products and wastes. In 1989, DEQ provided oversight for removal of the barrels. DEQ declared the site "no further action."

EMPIRE SAND AND GRAVEL NORTHEAST OF BILLINGS

is an inactive, 100-acre sand and gravel pit that operated from 1971 to 1987. Investigations and sampling events from 1983 to 1994 found localized petroleum contamination and pesticides, metals and polynuclear aromatic hydrocarbons in on-site soils.

ENERGY WEST GAS MANUFACTURING PLANT IN GREAT FALLS

is an inactive, five-acre gas manufacturing plant that operated from 1909 to 1928 and is now used as an office/shop complex. Investigations in 1994 and 1995 found petroleum, coal tar and cyanide contamination in on-site soils and groundwater. The owner is currently working with DEQ on a voluntary basis.

ENGINE REBUILDERS IN MISSOULA

is an inactive, two-acre auto and truck engine rebuilding business that operated from 1964 to 1994. Investigations in the 1990s found metals, solvent and petroleum contamination in on-site soils. The property owner plans to clean up the site in 1996.

ERMONT MILL TAILINGS SOUTHWEST OF ARGENTA

is an inactive, 50-acre mine and mill site that operated from 1932 to 1963. Mine and mill tailings contain elevated levels of metals. The tailings dam is seriously eroded and could release tailings to the drainage if it breaches. The site is being addressed by the DEQ Abandoned Mine Reclamation Bureau.

EVANS POST AND POLE IN BROWNING

is an inactive, 10-acre wood-treating facility that operated from the 1950s to 1989. Investigations in the 1980s and 1990s found wood-treating compound contamination in soils on site. In 1991, EPA contractors excavated and incinerated contaminated soils, sludges and liquids. Sampling in 1995 found no significant remaining contamination. DEQ declared the site "no further action."

EXXON REFINERY NORTHEAST OF BILLINGS

is an active, 73-acre crude oil refinery and tank farm that has operated since 1949. Investigations in the 1980s and 1990s found petroleum and organic compound contamination in soils and shallow groundwater. Facility operators are currently monitoring groundwater, remediating contaminated groundwater and treating petroleum-contaminated soils under DEQ Hazardous Waste Program oversight.

FALLS CHEMICAL INC. IN GREAT FALLS

is an inactive, six-acre pesticide formulating plant that operated from 1970 to 1991, when operators abandoned the site, leaving behind containers of pesticides and other

chemicals. Investigations in the 1970s, 1980s and 1990s found pesticides, metals and petroleum contamination in on-site soils. In 1993 and 1994, contractors for the site owner containerized pesticides and contaminated water and wastes and shipped them off site, steam-cleaned the inside of the building and monitored groundwater. Because the remaining groundwater contamination is associated with an adjacent site, DEQ declared this site "no further action" in 1995.

FARMERS UNION CENTRAL EXCHANGE IN LAUREL

is an active, 100-acre oil refinery and tank farm that has operated since 1930. Investigations in the 1980s found petroleum, metals and polynuclear aromatic hydrocarbon contamination in on-site soils. In 1992, site operators performed emergency remediation involving product recovery and air stripping after a subsurface petroleum leak. As an active facility, the site is regulated by the DEQ Hazardous Waste Program, which requires groundwater monitoring and corrective actions.

FISHER FLATS DUMP NORTHWEST OF VALIER

is an inactive, four-acre dump site. A 1990 site inspection found barrels containing solid waste, pesticide and antifreeze, but no apparent leakage. The Blackfeet Tribe is the lead agency for the site.

FLATHEAD COUNTY LANDFILL NORTH OF KALISPELL

is an active, 80-acre municipal landfill that has operated since 1971. Groundwater monitoring shows organic compound contamination in the on-site shop well but not in other wells. The landfill is currently installing a methane recovery system to deal with methane gas, which is often produced by landfills. The lead agency for this site is the DEQ Solid Waste Program.

FLATHEAD MINE AREA NORTH OF NIARADA

is an inactive, 25-acre silver mining area that operated sporadically from 1928 to the 1970s. In 1993, investigators sampled tailings, waste rock and adit discharges and found high levels of metals. The DEQ Abandoned Mine Reclamation Bureau is the lead agency for this site.

FLATHEAD POST & POLE SOUTHWEST OF AGENCY

is an inactive, nine-acre wood-treating facility that operated from 1976 to 1992. Investigations and sampling events in 1991 found surface soils were contaminated with wood-treating compounds and metals. In 1993, EPA contractors excavated approximately 3,420 cubic yards of contaminated soils. The Confederated Salish and Kootenai Tribes is now the lead agency to determine if any further action is needed at this site.

FORT KEOGH LIVESTOCK & RESEARCH LAB SOUTHWEST OF MILES CITY

is an active, 55,357-acre U.S. Department of Agriculture (USDA) research lab that has operated since 1924. In 1991, USDA consultants excavated a tar pit, removed 55-gallon drums and shipped these wastes off site. Further site evaluation may be necessary to fill in data gaps before DEQ can consider the facility for "no further action" status.

FORT MISSOULA OMS #2 IN MISSOULA

is an active, 45-acre military facility that has operated since 1877. An investigation in 1992 evaluated potential sources of contamination and identified a leach pit and two landfills as potential sources of petroleum and organic wastes.

FORT PECK PROJECT

is an active, 35-acre hydroelectric dam that began operation in 1933. Investigations in 1992 and 1993 found little evidence of contamination. DEQ may declare the site "no further action" depending on the results of an investigation by the U.S. Army Corps of Engineers.

FROHNER MEADOW (NELLIE GRANT) WEST OF CLANCY

is an inactive, seven-acre mine and mill site that operated from the 1880s to 1982. DEQ removed hazardous substances from mill buildings in 1992. In 1993, Abandoned Mine Reclamation Bureau (AMRB) contractors removed the old buildings, did surface regrading and seeding, placed lime rock in shafts and covered the shafts with grating. DEQ-AMRB hopes to complete reclamation of metal-laden tailings in 1996.

GENERAL ELECTRIC COMPANY IN BILLINGS

is an inactive, one-acre industrial electric motor repair and machine shop that operated from 1972 to 1986. Investigations and sampling events in the 1980s and 1990s for RCRA permitting and closure found low levels of organic compounds in on-site soils. The site owners removed drummed wastes and contaminated soils in 1986. Sampling may be necessary to ensure the facility is clean.

GEORGETOWN RAILROAD NEAR GEORGETOWN

is an inactive, 23-acre railroad spur that hauled ore to Anaconda from 1912 to 1924. Investigations in 1991, 1992 and 1993 found elevated levels of metals in soils and surface water.

GERALDINE AIRPORT

is an active, 64-acre aerial pesticide applicator facility that has operated since the 1950s. An investigation in 1991 found pesticide contamination in the upper foot of soil.

DEQ, along with the county, has completed a risk assessment for the site using grant funds. Based on the risk assessment, DEQ has declared the site "no further action."

GLASGOW AIR FORCE BASE

is an inactive, 6,000-acre base that operated from 1959 to 1977. Investigations found metals, petroleum and organic compound contamination in soils, lagoon sediments and groundwater. In 1995, the PLP removed numerous underground tanks. The remedial investigation is on-going.

GOLDEN MESSENGER MINE NORTHEAST OF YORK

is an inactive, 10-acre gold mine. From 1984 to 1991, several sampling events found elevated levels of metals and cyanide. Sampling of nearby residential wells did not detect any contamination. The DEQ Abandoned Mine Reclamation Bureau reclaimed the site in 1991. DEQ-CECRA declared the site "no further action."

GOLDSIL MINING COMPANY EAST OF MARYSVILLE

is an inactive, 50-acre gold mine and mill site that operated from the 1970s to 1980. A 1987 investigation documented elevated levels of cyanide and metals in soils, groundwater and surface water. The DEQ Abandoned Mine Reclamation Bureau is the lead agency for this site.

GRANITE TIMBER SOUTHWEST OF PHILIPSBURG

is an active, 25-acre wood-treating facility that has operated since 1960. A 1988 investigation found soils heavily contaminated by wood-treating compounds, as well as low levels of metals in soils and well water. The DEQ Hazardous Waste Program recently completed a legal enforcement action; DEQ-CECRA is now the lead program for the site.

GREAT FALLS CITY/COUNTY BARREL SITE

is an inactive, one-acre site that consisted of 53 military surplus barrels believed to have been abandoned in the 1950s. Investigations in 1991 and 1992 found the hazardous tar-like material in the barrels was leaking onto soils. In 1995, the Air Force removed the barrels and contaminated soil with DEQ oversight. When a final report is submitted, DEQ will declare the site "no further action."

GREAT FALLS CITY LANDFILL (25TH AVE.)

is an inactive, 10-acre municipal landfill that operated until the 1950s and where sludges from a nearby refinery were reportedly disposed. No sampling has occurred yet.

GREAT FALLS CITY LANDFILL (WIREMILL ROAD)

is an inactive, one-acre barrel disposal site on an old municipal landfill. Inspections in 1988 found the barrels were leaking organic compounds onto soils. In 1990, the U.S. Air Force paid for DEQ to remove 530 barrels and 316 tons of contaminated soils from the site. DEQ declared the site "no further action."

GREAT FALLS INTERNATIONAL AIRPORT

is an active, 125-acre U.S. Department of Defense (DOD) Air National Guard facility that has operated since 1947. A 1992 site investigation found petroleum and solvent contamination exceeding cleanup standards. In 1994, DOD remediated petroleum-contaminated soils from the fire training area. DOD contractors are currently preparing a remedial investigation/feasibility study for the remaining operable units.

GREAT FALLS REFINERY

is an active, 20-acre refinery that has operated since 1931. During the 1980s, the facility operator implemented groundwater monitoring and closure of the landfarm. Several investigations found low-level petroleum contamination on and near the site. Groundwater monitoring and corrective actions are being directed by the DEQ Hazardous Waste Program.

HARLOWTON MILWAUKEE ROUNDHOUSE

is an inactive, 25-acre railroad fueling, repair and maintenance facility that operated from 1907 to 1979. A 1995 investigation found on-site soils contaminated with arsenic, metals, oily wastes, hydrocarbons and pesticides. Surface water and groundwater had elevated levels of metals and pesticides. EPA is evaluating the site's status under CERCLA.

HARLOWTON WEED CONTROL DISTRICT

is an inactive, smaller than one acre, pesticide handling and storage facility that operated from the 1960s to 1989. Sampling in 1989 found pesticide-contaminated soils. From 1990 to 1993, the PLP remediated the site via off-site landfarming. The Montana Department of Agriculture is the lead agency for the site.

HART OIL REFINERY IN MISSOULA

is an inactive, 20-acre refinery that operated from 1924 to 1951. Investigations in 1985, 1986 and 1990 found on-site soils and groundwater contaminated with petroleum products. The PLP plans voluntary cleanup in 1996.

HAVRE REFINERY NORTHWEST OF HAVRE

is an inactive, 2¹/₂-acre oil refinery that operated from 1926 to 1940. A 1990 investigation found no visible evidence of contamination. Additional sampling may be necessary before the site can be declared "no further action."

HAYWIRE MILL SOUTH OF YAAK

is an inactive, ten-acre mine and mill site that was active from the 1890s to 1950. Studies in 1990 and 1991 found high levels of lead and low levels of cyanide in mine tailings. In 1993, the Montana Department of Transportation removed 130 cubic yards of tailings from the highway right-of-way.

HELENA LANDFILL

is an inactive, 51-acre municipal landfill that operated from the 1880s to 1991. Investigations in 1988 and 1989 found organic compounds on-site in groundwater. The landfill is currently undergoing closure procedures under the DEQ Solid Waste Program, the lead agency for the site.

HELENA REGIONAL AIRPORT

is an active airport. A 1990 investigation found high levels of metals in several acres of mine tailings east of the runways and petroleum contamination in a fire training area.

HIRSCHY CORRALS SOUTHWEST OF WISDOM

is an inactive, one-acre toxaphene cattle-dipping operation that was active from 1978 to 1981. A 1984 investigation found high levels of pesticides in soils in and near an evaporation pond. No contamination was detected in wells or surface water.

HOMCO FACILITY IN GLENDIVE

is an inactive, one-acre oil field service facility that operated from 1987 to 1989. A 1989 and 1990 sampling event found petroleum compounds, metals and solvent contamination in on-site soils. In 1991, the operator excavated the old sumps and adjacent contaminated soils. DEQ has declared the site "no further action."

HUNGRY HORSE DAM

is an inactive dump site on the old dam townsite that was used from 1948 to 1970. A 1992 investigation indicated low levels of dioxin compounds in some on-site soils. No other contaminants were detected.

IDEAL BASIC INDUSTRY IN TRIDENT

is an active, 30-acre cement processing plant that has been operating since 1936. Cement kiln dust reportedly impregnated with metals was disposed of in an on-site landfill. Investigations in 1992 and 1993 found no evidence of contamination or asbestos dumping.

J & N POST AND POLE EAST OF EVARO

is an inactive wood-treating facility that operated from 1971 to 1990. A 1991 investigation found on-site soil contamination with petroleum and wood-treating compounds.

JARDINE ARSENIC TAILINGS SOUTH OF JARDINE

is the site of historic mine tailings along Bear Creek. The tailings, containing high levels of metals, caused elevated metals concentrations in Bear Creek. In the 1980s, the tailings were removed. The site is regulated by the DEQ Hard Rock Bureau under an active mine permit.

JEFFERSON COUNTY WEED DISTRICT IN CLANCY

is an inactive, 1/2-acre pesticide handling and storage facility that operated from 1983 to 1988. Investigations in 1988 found pesticides in soils on and near the facility and in groundwater east of the site. In 1988, the PLP removed contaminated soils and provided treatment systems for affected well users under direction of the Montana Department of Agriculture. Since that time, pesticide levels in groundwater have declined significantly and DEQ has declared the site "no further action."

JET FUEL REFINERY NORTHEAST OF MOSBY

is an inactive, 30-acre refinery which operated from 1953 to 1976. A 1991 investigation indicated on-site soil contamination by petroleum products, metals and asbestos. The PLP is currently conducting a voluntary cleanup.

JOLIET WEED DISTRICT

is an inactive, 1/4-acre county weed control district shop that operated from the 1940s to the 1980s. Investigations between 1987 and 1991 found high levels of pesticides and dioxins in on-site soils. Cleanup using grant funds is proposed for 1996.

JOSLYN STREET TAILINGS IN HELENA

is an inactive, 4 1/2-acre metal ore mill site that operated between 1935 and 1938. Sampling events and investigations in 1994 and 1995 found that tailings high in metals had impacted soils and groundwater. The PLP will conduct a voluntary cleanup in 1996.

KAISER CEMENT (ASH GROVE) EAST OF MONTANA CITY

is an active, 486-acre cement production plant that has operated since 1962. Investigations in 1988 and 1992 found elevated levels of metals in kiln dust and soils. Numerous 55-gallon drums, some of which had leaked, were also found on site. The facility owner removed the barrels and stained soils in 1993. This site is regulated by the DEQ Hazardous Waste Program and Air Quality Division.

KALISPELL AIR FORCE STATION SOUTH OF LAKESIDE

is an inactive, one-acre Air Force station affected by a 1981 fuel spill. The site operator conducted fuel recovery and water supply replacement actions in 1981. A 1986 investigation found satisfactory cleanup of the fuel spill. A 1995 investigation found petroleum-

contaminated soils that may have resulted from other sources. Further investigation and cleanup may be necessary before the site can be declared "no further action."

KALISPELL LANDFILL (CEMETERY ROAD)

is an inactive, 10-acre city landfill that operated until 1971. A 1988 investigation found low levels of metals and solvents in on-site soils.

KALISPELL LANDFILL (WILLOW GLEN ROAD)

is an inactive, five- to 10-acre city landfill that operated until 1971. An investigation in 1988 found on-site soils contaminated with metals and pesticides. Investigators found no evidence of off-site migration.

KARST ASBESTOS MINE SOUTH OF GALLATIN GATEWAY

is an inactive, 40-acre asbestos mine that operated from the 1890s to 1976. A 1990 sampling event confirmed the presence of asbestos. The site's inaccessibility has made reclamation problematic. The USDA Forest Service is the lead agency for this site.

KENDALL VENTURE MINE NORTHWEST OF HILGER

is an inactive, 106-acre gold mine and heap leach that operated from 1984 to the 1990s. Cyanide in excess of drinking standards has been found in on-site groundwater. Mine operators cleaned up two 1991 cyanide spills under Montana Department of State Lands oversight. The DEQ Hard Rock Bureau is the lead agency for the site.

KENISON POLE PLANT NORTH OF TOWNSEND

is an inactive, 10-acre wood-treating facility that operated from 1967 to 1970. Sampling is needed to determine if the site can be declared "no further action."

KING'S CREEK SOUTHEAST OF HAYS

is the location of historic tailings from mines that operated between 1884 and 1941. A 1993 investigation found elevated levels of metals in tailings, surface water and sediments. The Zortman mine operator is currently removing 63,000 cubic yards of tailings and conducting erosion control, revegetation and other reclamation work with oversight by the DEQ Hard Rock Bureau and U.S. Bureau of Land Management.

L & R TRUCK AND SUPPLY IN LIBBY

is an inactive, one-acre truck repair facility that operated from 1975 to 1991. Investigations in the 1990s found open containers and leaking tanks of oily wastes, oily sludge in a buried sump, and soils contaminated with petroleum hydrocarbons and metals. Sampling of downgradient domestic wells found no groundwater contamination. The site is currently undergoing cleanup.

LAKE COUNTY WEED DISTRICT WEST OF RONAN

is an inactive, ³/₄-acre county weed district shop that operated until the 1990s. Investigations and sampling events in 1984 and 1990 found pesticides in on-site soils. Based on risk assessment results, DEQ has declared the site "no further action."

LAME DEER DRUMS IN LAME DEER

is an inactive, one-acre drum site where drums and asbestos piping had been abandoned. In 1989, EPA removed the drums and the piping. DEQ has declared the site "no further action."

LARRY'S POST AND TREATING COMPANY SOUTHEAST OF COLUMBIA FALLS

is an active, five-acre wood-treating facility that has operated since 1978. A 1989 investigation found on-site soils contaminated with wood-treating compounds and metals. EPA required the facility owners to fence the treating area, cap it with gravel and construct berms. The owners completed these actions in 1992. Current site activities are regulated by the DEQ Hazardous Waste Program.

LATTICE MATERIALS IN BOZEMAN

is an inactive, one-acre Montana Power Company (MPC) substation and operations/storage yard that operated from 1958 to 1978. A 1991 investigation found petroleum contamination in soils. In 1994, the site operator conducted a voluntary cleanup of the soil contamination. DEQ is awaiting the final cleanup report to determine whether the site can be declared "no further action."

LAUREL OIL AND REFINING COMPANY WEST OF BUTTE

is an inactive, three-acre oil refinery that operated from the 1920s to the 1930s. Several storage tanks are on site, and old maps show the former location of a cooling pond. Little else is known about this site.

LEWIS & CLARK NATIONAL FOREST (BARKER/HUGHESVILLE) EAST OF MONARCH

is an inactive, 300-acre metal mining and milling complex that operated from 1879 to 1981. Sampling indicated soils, groundwater and surface waters were contaminated by metals. Sixteen of the 46 abandoned mines at this site may be sources of contamination.

LEWIS CONSTRUCTION WEST OF VAUGHN

is an active, 15-acre gravel pit and hot mix plant that has operated since 1961. During corrective action in 1990, facility owners located, analyzed and removed drums which they had illegally buried in the gravel pit. Sampling of soils and groundwater in the excavations indicated slightly elevated metals and organic compounds. The DEQ Hazardous Waste Program is the lead agency for the site.

LIBBY BARREL SITE WEST OF LIBBY

is an inactive, seven-acre vacant lot where wastes were disposed in a large tank on site in 1978. In 1992, contractors for the current owners completed site cleanup, including shipping wastes off site. DEQ has declared the site "no further action."

LIMA UP RAILROAD IN LIMA

is an inactive, 11-acre railroad yard that operated from 1880 to 1952. Investigations in 1991 found minor asbestos and high levels of petroleum contamination in soils. In 1991 and 1992, the PLP conducted voluntary cleanup. DEQ has declared the site "no further action."

LOCKWOOD SOLVENT SITE

is the location of a 20-acre gasoline and solvent plume in groundwater. Investigations in 1991 and 1995 found a local gas station was the source of the gasoline plume. The DEQ Leaking Underground Storage Tank Program has directed the on-going cleanup of the gasoline plume by the PLP. The sources of the solvent plume are not yet known.

LODGE GRASS DRUMS

is an inactive, one-acre storage location of several drums of pesticides. EPA finished removing the drums in 1992, and soil sampling found no contamination. DEQ has declared the site "no further action."

LOHOF GRAVEL PIT NORTHEAST OF BILLINGS

is an inactive, 80-acre gravel pit that operated for about 40 years. A 1984 sampling event found solvent and organic compound contamination in on-site soils. A 1985 sampling event indicated no surface water contamination.

LONDONDERRY MINE NORTH OF MAXVILLE

is an inactive, two-acre gold mine that operated between 1915 and the 1930s. Investigations and sampling events in the 1980s and 1990s found high levels of metals in adit discharge and tailings. The DEQ Abandoned Mine Reclamation Bureau is the lead agency for this site.

MALMSTROM AIR FORCE BASE NORTHEAST OF GREAT FALLS

is an active, 3,500-acre U.S. Air Force base that has been operating since 1942. Investigations found low levels of petroleum and organics contamination in on-site soil and groundwater. Currently, the Air Force is conducting investigations to determine the potential risk to human health. The DEQ Hazardous Waste Program is the lead agency for the site.

MALTA AIRPORT

is the five-acre location of two active aerial pesticide application services that have been operating since the 1950s. Investigations in 1985 found pesticides in on-site soils and groundwater. Sampling in 1993 found no groundwater contamination and lower levels of pesticide soil contamination. The Montana Department of Agriculture is the lead agency for this site.

MARBLE CREEK POST YARD WEST OF SUPERIOR

is an inactive, one-acre wood-treating facility that operated from 1970 to 1976. A 1987 inspection found little visible evidence of contamination, but sampling may be necessary to declare the site "no further action."

McCULLOCH PURCHASE STATION NORTHWEST OF FAIRVIEW

is an active, 20- to 30-acre natural gas desulfurization plant that has operated since 1979. A site history and sampling may be necessary to consider declaring the site "no further action."

McLAREN MILL TAILINGS EAST OF COOKE CITY

is an inactive, 10-acre mine and mill that operated from the 1870s to 1967. Investigations found the mine tailings, on-site and off-site soil and surface water were contaminated with metals and questioned the stability of the tailings dam. In 1989, EPA, the lead agency for the site, conducted emergency actions to stabilize the tailings and prevent further metal contamination of Soda Butte Creek.

MERCER POST PLANT IN BOZEMAN

is an inactive, one-acre wood treating facility that operated from 1971 to 1974. A 1989 inspection found no visible evidence of contamination. Sampling may be necessary before the site can be declared "no further action."

MICROBIAL BIOTECHNOLOGY INC. NORTH OF POLSON

is an inactive, 11-acre biological research facility that operated from 1990 to 1992. Former operators abandoned numerous chemical drums on site. In 1995, the owner shipped the drums off site. DEQ is considering the site for "no further action" status.

MIDWAY STORE DUMP SOUTH OF RAVALLI

is an inactive, one- to two-acre landfill that operated from 1972 to 1980. A site inspection in 1989 found pesticide containers and 55-gallon drums. The site has not been sampled.

MIDWEST REFINING COMPANY IN CONRAD

is an inactive, one-acre oil refinery that was in operation in 1929. Little information is available about the site. Additional information and sampling may be necessary before the site can be declared "no further action."

MILES CITY AIRPORT

is an inactive, one-acre aerial pesticide applicator facility that operated from 1956 to 1989. Investigations in 1990 found contamination from pesticides in on-site soils. Based on a 1995 risk assessment, DEQ has declared the site "no further action."

MILES CITY LIVESTOCK CENTER

is an active, three-acre cattle-dipping facility that used toxaphene from 1976 until it was banned in 1984. Investigations in 1983 and 1984 found high levels of toxaphene in soils.

MILES CITY OIL REFINERY

is an inactive, 20-acre oil refinery that operated from 1922 to 1930. No evidence of contamination is visible. Additional information and sampling may be necessary before the site can be declared "no further action."

MILES CITY RAILYARD

is an inactive, 20-acre railroad fueling and repair facility that operated from the 1950s to the 1980s. A 1985-86 investigation found off-site migration of petroleum contamination in groundwater and low levels of organic compounds in soils. In 1995, DEQ-CECRA became the lead agency for the site and sent notice letters to PLPs requiring removal of underground storage tanks. Free product recovery from groundwater is on-going.

MILWAUKEE ROAD SOUTHWEST OF HAUGAN

is an inactive, 40-acre railroad switching yard that operated from 1909 to 1987. Inspections in 1988 and 1993 found petroleum contamination on-site. In 1995, DEQ sent notice letters to PLPs requiring remedial activities and access control. However, enforcement action will be needed to obtain compliance.

MILWAUKEE ROAD RIGHT-OF-WAY EAST OF ST. REGIS

is the site of a 1976 derailment in which 200 pounds of ignitable waste spilled. A 1994 inspection and sampling event found no evidence of remaining contamination. DEQ declared the site "no further action."

MILWAUKEE ROUNDHOUSE IN DEER LODGE

is an inactive, 27-acre roundhouse and refueling facility that operated from 1908 to 1980. From 1987 to 1989, several investigations found petroleum contamination in soil and groundwater at the site. A 1990 sampling event also found metals contamination. The PLP will conduct voluntary investigations in 1996.

MISSOULA LANDFILL

is an active, 140-acre landfill that has operated since 1969. A leachate plume contains elevated levels of metals and organic compounds. Current methane extraction and groundwater monitoring is being overseen by the DEQ Solid Waste Program.

MISSOULA SAWMILL

is an inactive, 30-acre sawmill that operated from 1920 to 1991. In 1985, a gasoline underground storage tank leaked and contaminated nearby wells. The PLPs provided an alternate water supply to affected well owners and eventually replaced the wells. A 1989 investigation found petroleum contamination in on-site soils. Groundwater monitoring following the tank removal found no further evidence of groundwater contamination by the early 1990s.

MISSOULA VO-TECH

is an active vocational technical school that has operated since 1973. Sampling has indicated metals in on-site tanks. Shop wastes may have been disposed of in a dry well and septic drainfield in the past.

MOE CHEVROLET IN POPLAR

is an inactive, one-acre car dealership and repair garage that ceased operations in 1986. In 1990, a company interested in purchasing the property excavated petroleum-contaminated soils and piled the soil on site and on property east of town. Further investigation is needed to determine whether the site requires additional cleanup.

MONTANA ARMY NATIONAL GUARD FUEL SPILL SOUTHWEST OF GREAT FALLS

is the site of an one-acre fuel spill from a military vehicle that occurred in 1991. Contaminated soils were stripped and landfarmed on-site. The soil was then leveled in place and reseeded in 1994. DEQ declared the site "no further action."

MONTANA DEPARTMENT OF TRANSPORTATION SHOP IN HELENA

is an active, nine-acre facility operated by the Montana Department of Transportation (MDT) since 1928. Investigations in 1988 to 1994 found contamination limited to the western portion of the site. Some monitoring wells contained low levels of organics and metals. The metals contamination in the monitoring wells may be attributable to another

source. MDT is addressing the site voluntarily with DEQ oversight.

MONTANA POWER COMPANY FRANK BIRD PLANT IN BILLINGS

is an active, one-acre electricity generating plant that began operations in 1968. An assessment in 1982 found little potential for release of hazardous substances. Additional site information may be needed before the site can be declared "no further action."

MONTANA POWER COMPANY JE CORETTE PLANT IN BILLINGS

is an active, 20-acre coal-fired electricity generating plant that has operated since 1968. An assessment in 1983 found little potential for release of hazardous substances. Additional site information may be needed before the site can be declared "no further action." The DEQ Hazardous Waste Program is the lead agency for the site.

MONTANA POWER COMPANY (MPC) MANUFACTURED GAS PLANT IN HELENA

is an inactive, 1/2-acre manufactured gas plant that operated from 1887 to 1931. The PLP demolished the plant in 1933 but left underground gas holders that contain approximately 2,000 cubic yards of tarry wastes and contaminated soil. A 1995 investigation indicated potential groundwater contamination with benzene. The PLP has proposed a voluntary cleanup in 1996.

MONTANA POWER COMPANY (MPC) MERCURY SITES - 144 LOCATIONS

are small natural gas metering stations throughout western and central Montana where liquid mercury from manometers dripped or spilled on the ground. The stations no longer use mercury. A 1992 assessment of more than 450 sites in Montana identified 144 sites which had mercury-contaminated soils. MPC excavated and properly disposed of contaminated soils at 140 of the sites in 1995 and will clean up the other four sites when conditions allow.

MONTANA POWER COMPANY STORAGE YARD IN BUTTE

is an active, 50-acre power substation and operating center that began operations in 1899. Investigations and sampling events in 1989 and 1991 found petroleum- and metals-contaminated soil and metals-contaminated groundwater. The party which disposed of some of the petroleum-contaminated soils on the property cleaned them up in 1991. The source of the metals contamination, which is higher than regional metals levels, has not yet been determined.

MONTANA RADIATOR WORKS IN BILLINGS

is an active, two-acre industrial and automotive radiator repair shop. A 1987 sampling event found elevated levels of metals in on-site wastes, that may have been disposed of in the septic system in the past.

MONTANA RAIL LINK ASBESTOS IN BOZEMAN

is an inactive, one-acre asbestos loading area that operated from the 1930s to the 1950s. Investigations in 1990 found asbestos in on-site soils. In 1990, property owners conducted emergency actions including posting warning signs and wetting of the property. In 1991, PLPs removed asbestos-laden soils. DEQ declared the site "no further action."

MONTANA RAIL LINK 1930 SOUTH AVE. W. FACILITY IN MISSOULA

is an active, two-acre equipment shop. A 1994 investigation found high concentrations of lead in some on-site soils. Also in 1994, Montana Rail Link (MRL) removed contaminated soils at the site. DEQ declared the site "no further action."

MONTANA STATE CHEMICAL LAB BUREAU IN HELENA

is an active, one-acre chemistry testing laboratory that has operated since 1955. No contamination problems are known to exist at the site. DEQ declared the site "no further action."

MONTANA STATE UNIVERSITY IN BOZEMAN

is an active, 1,170-acre state university that was established in 1893. A 1992 assessment found minimal migration pathways for contamination. In 1993, the university developed a hazardous waste minimization plan and sampled an open burn area where chemicals had been ignited. No contamination was found, and DEQ declared the site "no further action."

MONTANA SULPHUR AND CHEMICAL NORTHEAST OF BILLINGS

is an active, five-acre elemental sulfur production facility. A 1992 RCRA inspection found no violations of hazardous waste regulations. Until recently, the DEQ Hazardous Waste Program regulated the facility. DEQ-CECRA is now the lead program and will evaluate the need for further work at the facility.

MOTHER LODE GOLD & SILVER LTD. SOUTH OF EAST HELENA

is the one-acre location of a former silver recovery processing operation that operated from the 1970s to 1984. Investigations following a 1984 fire, during which cyanide and shop wastes were spilled, found high levels of cyanide and metals in on-site soils and groundwater. In 1984, EPA conducted an emergency cleanup. DEQ has declared the site "no further action."

MUSTER'S POST YARD NORTH OF THOMPSON FALLS

is an inactive, one-acre wood-treating facility that operated from 1969 to 1983. A 1990 sampling event and site inspection found on-site soil contaminated with wood-treating compounds.

NATIONAL BISON RANGE SOUTHEAST OF MOIESE

is an inactive, one-acre pesticide disposal area on a national wildlife refuge. Fifty bushels of pesticide-containing bait were buried at the site in the 1950s. An assessment in 1992 and sampling in 1994 found little potential for contamination migration. DEQ declared the site "no further action."

NORTH AMERICAN OIL REFINERY IN KALISPELL

is an inactive, five-acre oil refinery that operated from 1923 to 1931. A 1988 and 1989 investigation found slightly elevated levels of metals in soils. Migration of contaminants to groundwater is unlikely.

OLD AGENCY LANDFILL ON FORT BELKNAP AGENCY

is an inactive, five-acre landfill that operated for 60 years. Investigations in 1990 found four leaking drums on site and metals and pesticide compounds in soils, river sediments and an off-site wetland. Interim actions at the site would reduce some of the hazards at the site. The Gros Ventre and Assiniboine Tribes is the lead agency for this site.

OLD ARLEE DUMP

is an inactive, two-acre dump that operated for 10 years. The site has never been sampled to determine if any contamination is present. The Confederated Salish and Kootenai Tribes and the Bureau of Indian Affairs are the lead agencies for this site.

OLD CHARLO DUMP SOUTH OF CHARLO

is an inactive, two-acre dump that operated from 1972 to 1980. Pesticides may have been disposed there. The site has never been sampled.

OLD COMMUNITY DUMP SOUTHEAST OF RONAN

is an inactive, one-acre dump that operated for 25 years. During a 1989 site inspection, oily wastes and chemical odors were observed. Sampling has not occurred at this site. The Confederated Salish and Kootenai Tribes and/or DEQ-CECRA are the lead agencies for this site.

OLD CROW AGENCY DUMP SOUTHWEST OF CROW AGENCY

is an inactive, 12-acre landfill that had ceased operations by 1989. Sampling has not occurred at this site. The presence of chemical wastes is suspected. The Crow Tribe is the lead agency for this site.

OLD LAME DEER DUMP NORTHEAST OF LAME DEER

is an inactive, two-acre municipal landfill that operated from 1950 to 1984. In 1990, investigators noted the presence of empty chemical containers in the dump, but did not conduct any sampling. The Northern Cheyenne Tribe is the lead agency for this site.

OLD LIBBY AIRPORT POLE TREATING PLANT NORTHEAST OF LIBBY

is an inactive, one-acre wood-treating site that operated from 1937 to 1939. In 1991, the owner excavated two leaking underground storage tanks and discovered wood treating compound contamination under them. In 1992, the owner removed 500 cubic yards of contaminated soil. DEQ has declared the site "no further action."

OLD MONTANA PRISON IN DEER LODGE

is a former, one-acre asbestos contamination site on the grounds of the Old Montana Prison. A 1990 site inspection found friable asbestos strewn about a portion of the grounds. DEQ issued an administrative order to PLPs to cleanup the asbestos. The PLPs were unable to conduct the cleanup, so DEQ performed the cleanup activities. DEQ declared the site "no further action."

OLD POPLAR LANDFILL NORTH OF POPLAR

is an inactive, 10-acre landfill that operated for 12 years. A 1991 investigation found low levels of metals at a seep. The Assiniboine and Sioux Tribes is the lead agency for this site.

OLD STICKNEY DUMP WEST OF MISSOULA

is an inactive, one-acre illegal dump that operated until the 1970s. A 1994 investigation found solid waste and an oily sheen in the slough near the dump. Soil samples showed petroleum contamination. The Missoula City/County Health Department and DEQ-CECRA are the lead agencies for this site.

OPHEIM ASBESTOS WEST OF OPHEIM

is an inactive, 61-acre U.S. Air Force radar base that operated from 1955 to the 1980s. Inspections and sampling events in 1993 found asbestos, petroleum and volatile organic compounds contamination on site. DEQ is currently determining PLPs for the site.

OSWEGO LANDFILL NORTH OF OSWEGO

is an active, four-acre landfill area. The presence of chemicals and pesticides is suspected. The site has never been sampled. The Assiniboine and Sioux Tribes is the lead agency for this site.

PACIFIC HIDE & FUR (FOURTH AVE.) IN BILLINGS

is an active, five-acre recycling facility. Investigations in 1992 and 1995 found on-site soils contaminated with metals and petroleum compounds. In 1995, the site owner implemented a remedial investigation and conducted an interim action involving removal

of metal-contaminated soils.

PACIFIC HIDE & FUR (MINNESOTA AVE.) IN BILLINGS

is an inactive, three-acre recycling facility. Investigations in 1992 and 1993 found on-site soils contaminated by metals and petroleum compounds. A remedial investigation was completed in 1995.

PARK COUNTY LANDFILL NORTHEAST OF LIVINGSTON

is an active, 60-acre municipal landfill that has operated since 1977. A 1993 investigation found contamination by volatile organic compounds in on-site groundwater and a nearby spring. The DEQ Solid Waste Program is the lead agency for this site.

PETROLEUM REFINING COMPANY EAST OF SHELBY

is an inactive, 32-acre petroleum refinery that operated during the 1940s. In 1992, the PLP fenced sludge pits, contained hazardous materials and conducted sampling of the area under DEQ oversight. Only sludges and potentially contaminated soils remain on site.

PIERCE PACKING PLANT IN BILLINGS

is an inactive, two-acre food packing facility where releases of polychlorinated biphenyl compounds (PCBs) from electrical transformers occurred in 1979 and 1991. A 1993 sampling event found contamination in a sump, drainline and sorbed into concrete.

PINE TREE TIMBER IN BELGRADE

is an inactive, four-acre wood treating facility that operated from 1986 to 1991. Investigations in 1991 found on-site soils contaminated with wood-treating compounds. In 1993, the site owner began voluntary actions to investigate and clean up the facility. In 1995, wood-treating compounds were found in a downgradient well. DEQ required well sampling and an alternative water supply for the affected well users.

PLUM CREEK EVERGREEN EAST OF KALISPELL

is an active, 20-acre plywood mill that has operated since the 1970s. Investigations in the 1980s found low levels of organic compounds in a resin/glue disposal pit. The facility owner excavated the pit. Subsequent soil sampling and groundwater monitoring found no significant remaining contamination. DEQ declared the site "no further action."

POISONED OATS DISPOSAL SOUTH OF BROWNING

is the location where cyanide-laced oats were buried in 1969. In 1983, three cows reportedly died from poisoning after drinking from a pond north of the site. The Blackfeet Tribe is the lead agency for this site.

POPLAR POST OFFICE SITE IN POPLAR

is an active, one-acre gas station and former pesticide storage facility that has operated since 1932. Sampling events found on-site soils contaminated with petroleum compounds and pesticides. In 1990, the site owner excavated petroleum-contaminated soils. The DEQ Underground Storage Tank Program is the lead agency for the site.

PRAIRIE VIEW RECREATIONAL PARK NORTH OF BILLINGS

is an inactive, 80-acre dirt bike race track that operated from 1983 to 1985. Investigation in the 1980s found the track and adjacent soils were heavily saturated with waste oil and pesticides.

PRECIOUS METALS PLATING FACILITY NORTHEAST OF BONNER

is an inactive, one-acre metal plating facility that operated from 1983 to 1989. The facility operator illegally discharged waste into a nearby creek. Investigations in 1990 found abandoned chemicals inside the buildings and soil contamination with cyanide, solvents and metals. A record of decision on how the site will be cleaned up is expected in 1996.

RAILROAD TIE & TREATING YARD IN WHITE SULPHUR SPRINGS

is an inactive, six-acre wood-treating facility that operated from the 1960s to 1984. A 1992 sampling event found open vats of wood-treating compounds, wood-treating compound contamination in soils and traces of wood-treating compounds in sediments of Hot Springs Creek. In 1994, the EPA Emergency Response Branch excavated the most heavily contaminated soils.

RAU DISPOSAL PIT EAST OF SIDNEY

is an inactive, one-acre pit area in which oil field wastes were disposed from 1985 to 1989. A 1991 investigation found soils contaminated with petroleum compounds.

REAL LOG HOMES MANUFACTURING SITE NORTHWEST OF MISSOULA

is an active, 20-acre log home manufacturing facility that has operated since 1975. A 1991 investigation found high levels of wood-treating compounds in sludge near the old tanks and low levels in soils near a drum storage area. In 1994, the site owners conducted a tank and drum removal action. Further investigation is needed to determine if additional cleanup is needed.

RED ROCKS LAKE NATIONAL WILDLIFE REFUGE NORTH OF LAKEVIEW

is an inactive, 1¹/₃-acre waste dump and wood-treating site that operated from the 1960s to the 1970s. A 1993 sampling event found low levels of metals and petroleum

contamination in soils. The USDA Forest Service is the lead agency for this site and submitted a voluntary cleanup plan in March 1996.

REVAIS CREEK MINE SOUTHWEST OF DIXON

is an inactive, six- to 10-acre copper mine that operated from 1910 to 1949. Little information is available about this site. The Confederated Salish and Kootenai Tribes is the lead agency for this site.

RICHEY AIRPORT SOUTHWEST OF RICHEY

is an active, six-acre pesticide applicators' facility that has operated since 1974. A 1988 investigation found numerous leaking pesticide barrels inside a hanger. A 1990 remedial investigation found pesticide contamination in soils. In 1991, the site owner removed and properly disposed of the pesticide barrels. Based on risk assessment results, DEQ has declared the site "no further action."

RIVERSIDE POST & POLE PLANT WEST OF DE BORGIA

is an inactive, 1/4-acre wood-treating facility that ceased operations in 1985. A 1990 sampling event found soils contaminated with wood-treating compounds. In 1991 and 1992, the site owner landfarmed contaminated soils on site. DEQ has declared the site "no further action."

ROCKY BOY POST AND POLE NORTH OF ROCKY BOY

is an inactive, two-acre wood-treating facility that operated from 1971 to 1986. Sampling events found that soils, liquids and sludges were contaminated by wood-treating compounds. Contaminant sources have been removed by EPA, but it is unknown if all affected media have been completely remediated. EPA and/or the Chippewa-Cree Tribe are the lead agencies for the site.

ROCKY MOUNTAIN LABORATORY IN HAMILTON

is an active, 10- to 15-acre federal research laboratory where low-level radioactive wastes and lab chemicals have been disposed. A 1995 site investigation evaluated the magnitude and extent of contamination. Sampling results have not yet been reviewed.

ROCKY MOUNTAIN PHOSPHATE EAST OF GARRISON

is an inactive, 25- to 35-acre phosphate plant that operated from 1963 to 1976. Investigations in the 1980s and 1990s found some 55-gallon drums, a large tank, miscellaneous debris and some piles of high-pH material. The EPA and Powell County are addressing the site under the Brownfields Program.

ROUNDUP LANDFILL NORTHWEST OF ROUNDUP

is an inactive, nine-acre municipal landfill that operated from 1972 to 1985. A 1988 investigation found no evidence of contamination based on limited surface soil sampling. An adequate site investigation is needed before DEQ can declare the site "no further action."

ROUNDUP REFINING COMPANY IN BUTTE

is an inactive, two- to three-acre oil refinery that operated from 1926 to 1927. A 1989 site inspection found no visible evidence of contamination. Additional site history and sampling may be needed at this site before DEQ can declare it "no further action."

RUSSELL OIL COMPANY IN BILLINGS

is an inactive, one-acre oil refinery that operated from 1928 to 1935. No evidence of contamination is visible at the site. Additional information is necessary before DEQ can declare the site "no further action."

RUSSELL OIL COMPANY IN BUTTE

is an inactive, 15- to 20-acre oil refinery that operated from 1927 to 1940. A 1988 site investigation found low levels of petroleum and other organic compound contamination in soils. Additional information may be necessary at this site before DEQ can declare the site "no further action."

S & W SAWMILL INC. NEAR DARBY

is an inactive, one-acre sawmill that operated from 1964 to 1979. Investigations and sampling events found wood-treating compound contamination in on-site groundwater and soils.

SAFETY KLEEN IN HELENA

is an inactive, one-acre service center that ceased operations in 1980. Inspections in the 1980s found small amounts of sludge leaking from a storage tank. Additional sampling may be needed before DEQ can declare the site "no further action."

SAINT LABRE PLASTIC FACTORY NORTH OF ASHLAND

is an inactive, three-acre plastics manufacturing plant that operated from 1963 to 1977. Wastes were reportedly disposed of in an on-site lagoon. No samples have been taken at this site. The Northern Cheyenne Tribe is the lead agency at this site.

SAINT REGIS BATTERY PIT SOUTHEAST OF SAINT REGIS

is an inactive, less than one-acre site used for disposal of railroad switching system batteries and other debris. In 1993, the site owner investigated the site and removed batteries, pumped contaminated water out of the pit and sampled soils and water. Voluntary actions

were completed in 1995. Further investigation or removal of remaining contamination may be necessary before DEQ can declare the site "no further action."

SANNES FARM NORTHEAST OF SILESIA

is an active, 40-acre scrapyard and manufacturing plant that is the site of a metal-laden liquid spill in the 1970s. A 1993 investigation determined on-site soils were contaminated with cyanide and metals. A 1995 inspection revealed leaking pesticide containers, which the Montana Department of Agriculture is handling.

SCOTT FEED LOT SOUTHEAST OF BILLINGS

is an active, 160-acre feed lot and cattle ranch that has operated since 1978 and included a cattle-dipping operation. Sampling events in the 1980s found limited pesticide contamination in on-site soils. Further investigation is necessary.

SCRATCH GRAVEL LANDFILL NORTH OF HELENA

is an inactive, 23-acre municipal landfill that operated from 1960 to 1994. Investigations in 1988 and 1989 found pesticides and organic compounds in groundwater. A remedial investigation is on-going and will be followed by corrective actions. The DEQ Solid Waste Program is the lead agency for this site.

SLUICE GULCH LEAKING MINE ADIT SOUTHWEST OF PHILIPSBURG

is an inactive, 40-acre silver and gold mine. Investigation in 1993 found elevated metals in surface water, adit discharge and tailings. The U.S. Bureau of Land Management is the lead agency for this site.

SOMERS MARINA IN SOMERS

is an inactive, one-acre sawmill that operated from 1900 to 1955. Inspections in 1991 found limited soil contamination with petroleum and other organic compounds.

STAUFFER CHEMICAL COMPANY SOUTHEAST OF RAMSAY

is an active, 860-acre phosphorus production plant that has operated since 1952 and closed out most of its operations in 1995. A 1988 investigation found elevated metals and petroleum compounds. The DEQ Hazardous Waste Program is the lead agency for this site.

STRONGS POST YARD IN LIVINGSTON

is an inactive wood-treating facility that operated from 1970 to 1973. Additional site history and sampling may be needed before DEQ can declare the facility "no further action."

STRUNK MINING NORTHEAST OF LEWISTOWN

is an inactive, five-acre cyanide heap-leach operation that operated from 1976 to 1986. A 1992 investigation determined water in the on-site pond contained high levels of cyanide and metals. In 1995, the pond was filled in. Further investigation is needed to determine if additional cleanup is warranted.

SUMMIT-DANA LTD. IN BOZEMAN

is an inactive, two-acre electronics manufacturing facility that began operations in 1978. Hazardous wastes were stored in barrels on-site and have been removed. Additional site history and sampling may be needed at this site before DEQ can declare it "no further action."

TANK HILL IN CUT BANK

is an active, 40-acre petroleum storage area. Investigations and sampling events in the 1980s and 1990s found as much as 16 feet of free product in monitoring wells and organic vapors on and off site. In 1994, the DEQ Leaking Underground Storage Tank Program turned over regulatory authority to DEQ-CECRA, which has proceeded with notice letters and remedial investigation planning.

TENMILE CREEK SOUTHWEST OF HELENA

consists of 40 acres of inactive mine and mill sites that were active from the 1870s to the 1930s. Tailings and wastes contain elevated levels of arsenic and metals. The City of Helena and Lewis and Clark County obtained a 1995 grant to reclaim portions of the Tenmile drainage. In 1995, EPA conducted a removal of tailings from a residential yard. The city, county, DEQ-Abandoned Mine Reclamation Bureau and EPA are planning reclamation activities at different areas within this site.

TEXACO-SUNBURST WORKS IN SUNBURST

is an inactive, 380-acre refinery that operated from 1928 to 1961. Investigations and sampling events in the 1980s and 1990s found elevated levels of metals and petroleum compounds in on-site soils, sludges and surface water. In 1993, the potentially liable party completed an interim action which involved the removal and disposal of the majority of asbestos-containing materials. The PLP will produce a draft feasibility study in 1996.

THIRD STREET (NW) GROUNDWATER SITE IN GREAT FALLS

is an active, 11¹/₂-acre county shop and oil manufacturing complex that has operated since 1936. Investigations found petroleum and solvent contamination in groundwater. The contaminant sources have not all been identified yet.

THOMPSON FALLS RESERVOIR IN THOMPSON FALLS

is a 200-acre reservoir created by a hydroelectric dam built in 1915. Sampling events in 1985 and 1986 found elevated levels of metal contamination in reservoir sediments. Metal contamination was not found in groundwater wells.

THORIUM CITY WASTE DUMP WEST OF GRANT

is an inactive, 65-acre thorium mine and tailings site that was mined from 1950 to the 1960s. The U.S. Bureau of Land Management fenced the site and posted warning signs after sampling in 1986 found radioactivity that exceeded permissible levels. The DEQ Abandoned Mine Reclamation Bureau is the lead agency for this site.

TOWNSEND POST & POLE EAST OF TOWNSEND

is an inactive, 14-acre wood-treating facility that operated since the 1970s. A 1990 sampling of soils contaminated in a 1985 spill found moderate levels of wood-treating compounds. The soils were excavated by the owner and stockpiled onsite.

TRANSBAS NORTHEAST OF BILLINGS

is an active, 27-acre pesticide formulating plant that has been in operation since 1977. Early sampling events found that a plume of pesticide-contaminated groundwater has migrated off-site. In 1988, the site operator excavated 80 tons of contaminated soil. Groundwater monitoring and upgrading of the groundwater treatment system are continuing under DEQ Hazardous Waste Program oversight.

TREASURE STATE REFINING COMPANY IN SHELBY

is an inactive, 10-acre oil refinery that operated from 1938 to 1947. Limited surface soil sampling in 1988 found no evidence of contamination. Additional sampling may be necessary before DEQ can declare the site "no further action."

TUCSON HEBREW ACADEMY SOUTH OF DEL BONITA

is an inactive, 30-acre Air Force radar base. A 1991 investigation found friable asbestos on site. The Blackfoot Tribe, Department of Defense and DEQ-CECRA are investigating ways to clean up the facility.

TULE CREEK GAS PLANT NORTHWEST OF POPLAR

is an inactive, five-acre natural gas sweetening plant that operated from 1968 to 1977. In 1993, investigators found a reclaimed trench smelling of petroleum.

TUNGSTEN MILL NORTHWEST OF GLEN

is an inactive, 130-acre tungsten mill and tailings site that operated from 1944 to 1957. Investigations and sampling events found tailings with elevated metals, petroleum-

saturated soils in a tailings pond and a petroleum-contaminated residential well. In 1990, the Department of State Lands partially reclaimed the site. The DEQ Water Quality Division is the lead agency for the groundwater contamination.

TWIN CREEKS LOGGING CAMP EAST OF BONNER

is an inactive, four-acre logging camp that operated from the 1950s to 1986. A 1990 investigation found petroleum contamination in soils and groundwater. In 1992, site owners began excavating contaminated soils and monitoring groundwater. The DEQ Water Quality Division is the lead agency for this site.

U.S. ANTIMONY CORP. WEST OF THOMPSON FALLS

is an active, 30- to 40-acre antimony mining and processing operation that has operated since 1970. On-site tailings ponds contain high levels of metals, and because they are unlined, the ponds could leak into nearby creeks. Groundwater monitoring is on-going. The site is regulated under an active mine permit from the DEQ Hard Rock Bureau.

UNION OIL (FLYING J) SOUTHEAST OF CUT BANK

is an inactive crude oil refinery that operated from 1937 to 1983. A tank farm is still active on the site. Investigations found petroleum contamination of shallow groundwater and soil. Groundwater monitoring is on-going with oversight by the DEQ Hazardous Waste Program.

UNION TANK CAR COMPANY IN LAUREL

is an inactive, 5¹/₂-acre railroad car repair and cleaning facility that operated from 1950 to 1983. Upon closure, the operator removed underground storage tanks and an oil-water separator and covered oil pits. DEQ is unlikely to require further action unless land use in the area changes or significant contamination is documented.

VALLEY GARDEN VAT NORTH OF ENNIS

is an inactive, smaller than one acre, cattle-dipping site that operated from 1980 to 1984. A 1983 sampling event found high levels of dipping compound in soils in a limited area. The contamination does not appear to be migrating. A voluntary cleanup is being considered for 1996.

WAPA SUBSTATION IN SHELBY

is an active, 1/2-acre electrical transformer station where, in the 1980s, a transformer blew up. The site owner cleaned up the majority of the PCB-contaminated soils at that time. A 1993 investigation found that minor contamination remained. The site is now fenced.

WEOWNA OIL REFINERY EAST OF WINNETT

is an inactive, one-acre oil refinery that operated from 1921 to the 1940s. Inspections in 1989 found little visible evidence of contamination. Additional sampling may be needed before DEQ can declare the site "no further action."

WEST BOOTLEGGER BARREL SITE IN BLACK EAGLE

is an one-acre barrel site consisting of 26 barrels discovered in 1995. DEQ plans to require barrel removal and soil cleanup in 1996.

WEST FRONT BATTERY SITE IN MISSOULA

is an inactive, $\frac{1}{10}$ -acre site where batteries were disposed of. Soils near the batteries were contaminated with lead. After a 1995 cleanup involving removal of contaminated soils, DEQ declared the site "no further action."

WEST SECOND STREET IN HAVRE

is an area of gasoline contamination in shallow groundwater. Investigations have not yet determined the source of the contamination.

WESTERN BY-PRODUCTS NORTHWEST OF GREAT FALLS

is 10-acre site of a former pesticide manufacturing company that operated from 1971 to 1975. Sampling events in the 1970s and 1980s found pesticide contamination in soils. In 1989, the site operator excavated some contaminated soil. DEQ needs further documentation to verify cleanup is complete.

WICKES SMELTER IN WICKES

is an inactive, 60-acre metals smelter that operated from 1876 to 1949. A 1988 assessment found soils, groundwater and surface water contaminated with metals. The DEQ Abandoned Mine Reclamation Bureau is the lead agency.

WILSALL PCB IN WILSALL

is an inactive, one-acre area where a former resident dismantled electrical transformers and burned transformer oil. DEQ inspections in 1991 found soils contaminated with polychlorinated biphenyls (PCBs), dioxins and metals. In 1991, a PLP fenced, stabilized and sampled the site. In 1994, a PLP removed the contaminated soils, and DEQ declared the site "no further action."

WOLF POINT REFINERY EAST OF WOLF POINT

is an inactive, 15- to 20-acre oil refinery that operated from 1962 to 1985. A potential exists for soil and groundwater contamination with petroleum compounds, metals and hydrogen sulfide. No sampling has occurred.

YALE OIL CORP. IN KALISPELL

is an inactive, two-acre petroleum bulk plant and refinery that operated from 1938 to 1978. Investigations in 1985 and 1986 found petroleum contamination in soils and groundwater. In 1993, the site operator cleaned up contaminated soils. The PLP conducted three groundwater monitoring events in 1995.

YALE OIL OF SOUTH DAKOTA IN BILLINGS

is an inactive, 50- to 60-acre oil refinery that operated from 1929 to 1949. Investigations in 1989 found on-site soil contamination from metals and petroleum compounds and metal contamination in surface water and sediments.

YELLOWSTONE BRIDGE ASBESTOS NORTH OF LIVINGSTON

is a one-acre site consisting of asbestos-containing materials dumped along railroad tracks. In 1995, DEQ required the PLP to cover the asbestos and post "No Trespassing" signs. The site will be reclaimed in 1996.

ZORTMAN/LANDUSKY MINES NORTHWEST OF ZORTMAN

is an active, 800-acre gold mining facility that has operated intermittently since 1892. Nine cyanide leaks have occurred since 1979. Contaminated water has impacted a water supply and wildlife. The site is regulated under an active mine permit with the DEQ Hard Rock Bureau.

MONTANA'S FEDERAL SITES

SITE	CITY	COUNTY
Anaconda Smelter	Anaconda	Deer Lodge
East Helena Smelter	East Helena	Lewis and Clark
Idaho Pole	Bozeman	Gallatin
Libby Groundwater	Libby	Lincoln
Milltown Reservoir	Milltown	Missoula
Montana Pole and Treating	Butte	Silver Bow
Mouat Industries	Columbus	Stillwater
Silver Bow Creek/Butte Area	Butte	Silver Bow

MONTANA CECRA (NON-NPL) PRIORITY SITES

APRIL 1996

SITE	CITY	COUNTY
Agency Dump ²	Agency	Sanders
Flathead Post and Pole ²	Agency	Sanders
Big Hole Post Plant	Argenta	Beaverhead
Ermont Mill Tailings ³	Argenta	Beaverhead
Old Arlee Dump ²	Arlee	Lake
Saint Labre Plastic Factory ²	Ashland	Rosebud
Burlington Northern Derailment Site, Bainville	Bainville	Roosevelt
Apex Mill - Bannack State Park	Bannack	Beaverhead
Basin Mining Site	Basin	Jefferson
Comet Mine (High Ore Creek) ³	Basin	Jefferson
Pine Tree Timber	Belgrade	Gallatin
Belle Creek Barrel Site	Belle Creek	Powder River
Big Horn Oil and Refining Company	Billings	Yellowstone
Billings Grain Terminal	Billings	Yellowstone
Billings PCE Groundwater	Billings	Yellowstone
Billings Sanitary Landfill	Billings	Yellowstone
Burlington Northern Fueling Facility, Billings	Billings	Yellowstone
Coffman Lumber and Treatment Company	Billings	Yellowstone
Comet Oil Company	Billings	Yellowstone
Conoco Billings Refinery *	Billings	Yellowstone
Conoco Landfarm *	Billings	Yellowstone
Department of Army, AMSA #5 ³	Billings	Yellowstone
Empire Sand and Gravel	Billings	Yellowstone
Exxon Refinery & Old Flare Site *	Billings	Yellowstone
General Electric Company	Billings	Yellowstone
Lockwood Solvent Site	Billings	Yellowstone
Lohof Gravel Pit	Billings	Yellowstone
Montana Power Company Frank Bird Plant	Billings	Yellowstone
Montana Power Company JE Corette Plant *	Billings	Yellowstone
Montana Radiator Works	Billings	Yellowstone
Montana Sulphur and Chemical Company	Billings	Yellowstone
Pacific Hide & Fur - Billings 4th Ave.	Billings	Yellowstone
Pacific Hide & Fur - Minnesota Ave.	Billings	Yellowstone
Pierce Packing Plant	Billings	Yellowstone
Prairie View Recreational Park	Billings	Yellowstone
Russell Oil Company - Billings	Billings	Yellowstone
Scott Feed Lot	Billings	Yellowstone
Transbas *	Billings	Yellowstone
Yale Oil of South Dakota	Billings	Yellowstone
Anaconda Mineral Company - Great Falls	Black Eagle	Cascade
Bootlegger Trail Site	Black Eagle	Cascade
Chandelle Lane Barrel Site	Black Eagle	Cascade

*RCRA Permitted Facilities

²Reservation Facilities

³Federal Facilities

CECRA (Non-NPL) PRIORITY SITES

SITE	CITY	COUNTY
Great Falls City Landfill, 25th Ave	Black Eagle	Cascade
Great Falls Refinery, Phillips Petroleum *	Black Eagle	Cascade
West Bootlegger Barrel Site	Black Eagle	Cascade
Precious Metals Plating Facility ³	Bonner	Missoula
Twin Creeks Logging Camp	Bonner	Missoula
Boulder River Railroad	Boulder	Jefferson
Bozeman Old City Landfill	Bozeman	Gallatin
Bozeman Solvent Site	Bozeman	Gallatin
CMC Asbestos Bozeman	Bozeman	Gallatin
Developmental Technology	Bozeman	Gallatin
Lattice Materials	Bozeman	Gallatin
Mercer Post Plant	Bozeman	Gallatin
Montana Rail Link Asbestos	Bozeman	Gallatin
Montana State University *	Bozeman	Gallatin
Summit-Dana Ltd.	Bozeman	Gallatin
Burlington Northern Derailment Site, Bridger	Bridger	Carbon
Blackfeet Pencil Factory ²	Browning	Glacier
Blackfeet Post and Pole ²	Browning	Glacier
Chevron USA, Inc. Browning Bulk (Hoyt Dist.) ²	Browning	Glacier
Evans Post and Pole ²	Browning	Glacier
Poisoned Oats Disposal ²	Browning	Glacier
Busby CCC Camp ²	Busby	Big Horn
Burlington Northern Fueling Facility, Butte	Butte	Silver Bow
Butana Speedway	Butte	Silver Bow
Butte-Silver Bow County Landfill	Butte	Silver Bow
Department of Energy MSE Test Facility * ³	Butte	Silver Bow
Laurel Oil and Refining Co.	Butte	Silver Bow
Montana Power Company Storage Yard	Butte	Silver Bow
Roundup Refining Co.	Butte	Silver Bow
Russell Oil Company, Butte	Butte	Silver Bow
Old Charlo Dump ²	Charlo	Lake
Diamond Asphalt Co.	Chinook	Blaine
Frohner Meadow (Nellie Grant)	Clancy	Jefferson
Jefferson County Weed District	Clancy	Jefferson
Clyde Park Asbestos	Clyde Park	Park
Anaconda Aluminum Co., Columbia Falls *	Columbia Falls	Flathead
Beaver Wood Products	Columbia Falls	Flathead
Larry's Post and Treating Co.	Columbia Falls	Flathead
Conrad Refining Company	Conrad	Pondera
Midwest Refining Co.	Conrad	Pondera
McLaren Mill Tailings	Cooke City	Park
Creston Post and Pole Yard	Creston	Flathead
Old Crow Agency Dump ²	Crow Agency	Big Horn
Carter Oil Refinery (Exxon) ²	Cut Bank	Glacier

*RCRA Permitted Facilities

²Reservation Facilities³Federal Facilities

CECRA (Non-NPL) PRIORITY SITES

SITE	CITY	COUNTY
Tank Hill	Cut Bank	Glacier
Union Oil - Cut Bank Refinery *	Cut Bank	Glacier
S and W Sawmill	Darby	Ravalli
Riverside Post & Pole Plant	De Borgia	Mineral
Milwaukee Roundhouse	Deer Lodge	Powell
Old Montana Prison Asbestos	Deer Lodge	Powell
Dixon/Perma Dump ²	Dixon	Sanders
Revais Creek Mine ²	Dixon	Sanders
Mother Lode Gold & Silver, Ltd.	East Helena	Lewis and Clark
Bohrman's Exxon	Ennis	Madison
Valley Garden Vat	Ennis	Madison
Burlington Northern Fueling Facility, Essex	Essex	Flathead
Burlington Northern Derailment Site, Evaro ²	Evaro	Missoula
J & N Post and Pole ²	Evaro	Missoula
McCulloch Purchase Station	Fairview	Richland
BLM Illegal Airstrip ³	Flatwillow	Musselshell
Old Agency Landfill ²	Fort Belknap Agency	Blaine
Fort Peck Project ³	Fort Peck	Valley
CMC Asbestos, Gallatin Gateway	Gallatin Gateway	Gallatin
Karst Asbestos Mine ³	Gallatin Gateway	Gallatin
Burlington Northern Derailment Site, Garrison	Garrison	Powell
Rocky Mountain Phosphate	Garrison	Powell
Georgetown Railroad	Georgetown	Deer Lodge
Geraldine Airport	Geraldine	Choteau
Burlington Northern Fueling Facility, Glasgow	Glasgow	Valley
Glasgow Air Force Base	Glasgow	Valley
Tungsten Mill Tailings ³	Glen	Beaverhead
Burlington Northern Fueling Facility, Glendive	Glendive	Dawson
Dowell Schlumberger	Glendive	Dawson
Homco Facility	Glendive	Dawson
Thorium City Waste Dump ³	Grant	Beaverhead
Burlington Northern Fueling Facility, Great Falls	Great Falls	Cascade
Energy West Gas Manufacturing Plant	Great Falls	Cascade
Falls Chemical, Inc.	Great Falls	Cascade
Great Falls City Landfill, Wiremill Rd.	Great Falls	Cascade
Great Falls City/County Barrel Site	Great Falls	Cascade
Great Falls International Airport, MTANG ³	Great Falls	Cascade
Malmstrom Air Force Base * ³	Great Falls	Cascade
Montana Army National Guard Fuel Spill	Great Falls	Cascade
Third Street (NW) Groundwater Site	Great Falls	Cascade
Western By-Products	Great Falls	Cascade
Rocky Mountain Laboratory - Hamilton ³	Hamilton	Ravalli
Harlowton Milwaukee Roundhouse	Harlowton	Wheatland
Harlowton Weed Control District	Harlowton	Wheatland

*RCRA Permitted Facilities

²Reservation Facilities³Federal Facilities

CECRA (Non-NPL) PRIORITY SITES

SITE	CITY	COUNTY
Milwaukee Road - Haugan	Haugan	Mineral
Burlington Northern Fueling Facility, Havre	Havre	Hill
Burlington Northern Krezelak Pond	Havre	Hill
Burlington Northern Racetrack Pond	Havre	Hill
Havre Refinery	Havre	Hill
West Second Street - Havre	Havre	Hill
King's Creek ²	Hays	Blaine
Burlington Northern Derailment Site, Helena	Helena	Lewis and Clark
Burlington Northern Fueling Facility, Helena	Helena	Lewis and Clark
Helena Landfill	Helena	Lewis and Clark
Helena Regional Airport	Helena	Lewis and Clark
Joslyn Street Tailings	Helena	Lewis and Clark
Montana Dept. of Transportation Shop, Helena	Helena	Lewis and Clark
Montana Power Company Manufactured Gas Plant	Helena	Lewis and Clark
Montana State Chemical Laboratory Bureau	Helena	Lewis and Clark
Safety Kleen	Helena	Lewis and Clark
Scratch Gravel Landfill	Helena	Lewis and Clark
Tenmile Creek	Helena	Lewis and Clark
Kendall Venture Mine	Hilger	Fergus
Bonneville Power Administration ³	Hot Springs	Sanders
Camas Creek Oil Spill ²	Hot Springs	Sanders
Lewis & Clark National Forest ³	Hughesville	Judith Basin
Hungry Horse Dam Townsite ³	Hungry Horse	Flathead
Burlington Northern Fueling Facility, Jones Jct.	Huntley (Jones Jct.)	Yellowstone
Jardine Arsenic Tailings	Jardine	Park
Corbin Flats	Jefferson City	Jefferson
Joliet Weed District	Joliet	Carbon
Flathead County Landfill	Kalispell	Flathead
Kalispell City Landfill, Cemetery Road	Kalispell	Flathead
Kalispell Landfill, Willow Glen Road	Kalispell	Flathead
Kalispell Pole and Timber	Kalispell	Flathead
North American Oil Refinery	Kalispell	Flathead
Plum Creek Evergreen	Kalispell	Flathead
Reliance Refining Company	Kalispell	Flathead
Yale Oil Corporation, Kalispell	Kalispell	Flathead
Big West Oil Refinery	Kevin	Toole
Kalispell Air Force Station	Lakeside	Flathead
Red Rock Lakes National Wildlife Refuge ³	Lakeview	Beaverhead
Lame Deer Drums ²	Lame Deer	Rosebud
Old Lame Deer Dump ²	Lame Deer	Rosebud
Burlington Northern Fueling Facility, Laurel	Laurel	Yellowstone
Farmers Union Central Exchange *	Laurel	Yellowstone
Union Tank Car Co.	Laurel	Yellowstone
Arro Oil Refinery	Lewistown	Fergus

*RCRA Permitted Facilities

²Reservation Facilities³Federal Facilities

CECRA (Non-NPL) PRIORITY SITES

SITE	CITY	COUNTY
Berg Post and Pole	Lewistown	Fergus
Central Post and Treating Co.	Lewistown	Fergus
Continental Oil Refinery, Lewistown	Lewistown	Fergus
Strunk Mining	Lewistown	Fergus
L & R Trucking	Libby	Lincoln
Libby Barrel Site	Libby	Lincoln
Old Libby Airport Pole Treating Facility ³	Libby	Lincoln
Lima Union Pacific Railroad	Lima	Beaverhead
Alice Creek Post and Pole	Lincoln	Lewis and Clark
Upper Blackfoot Mining Complex	Lincoln	Lewis and Clark
Burlington Northern Livingston Shop Complex	Livingston	Park
Mission Wye	Livingston	Park
Park County Landfill	Livingston	Park
Strongs Post Yard	Livingston	Park
Yellowstone Bridge Asbestos	Livingston	Park
Lodge Grass Drums ²	Lodge Grass	Big Horn
BLM Steamboat Point ³	Loma	Choteau
Malta Airport	Malta	Phillips
Goldsil Mining Co.	Marysville	Lewis and Clark
Londonderry Adit (Mine) ³	Maxville	Granite
Ft. Keogh Livestock & Range Research Lab ³	Miles City	Custer
Miles City Airport	Miles City	Custer
Miles City Livestock Center	Miles City	Custer
Miles City Oil Refinery	Miles City	Custer
Miles City Railyard	Miles City	Custer
A.J.'s Laundry and Linen	Missoula	Missoula
All American Bumper and Plating	Missoula	Missoula
American Dental	Missoula	Missoula
Borden, Inc.	Missoula	Missoula
Burlington Northern Derailment Site, Missoula	Missoula	Missoula
Burlington Northern Fueling Facility, Missoula	Missoula	Missoula
Engine Rebuilders	Missoula	Missoula
Fort Missoula OMS #2 ³	Missoula	Missoula
Hart Oil Refinery	Missoula	Missoula
Missoula Landfill	Missoula	Missoula
Missoula Sawmill	Missoula	Missoula
Missoula Vo-Tech	Missoula	Missoula
Missoula White Pine and Sash	Missoula	Missoula
Montana Rail Link 1930 South Avenue West Facility	Missoula	Missoula
Old Stickney Dump	Missoula	Missoula
Real Log Homes Manufacturing Site	Missoula	Missoula
West Front Battery Site	Missoula	Missoula
National Bison Range ^{2 3}	Moiese	Lake
Kaiser Cement *	Montana City	Jefferson

*RCRA Permitted Facilities

²Reservation Facilities³Federal Facilities

CECRA (Non-NPL) PRIORITY SITES

SITE	CITY	COUNTY
Jet Fuel Refinery ³	Mosby	Garfield
Belt Creek CCC Camp ³	Neihart	Cascade
Carpenter & Snow Creek Mining Complex	Neihart	Cascade
Flathead Mines	Niarada	Flathead
Opheim Asbestos	Opheim	Valley
Oswego Landfill ²	Oswego	Valley
Burlington Northern Paradise Tie Treatment *	Paradise	Sanders
Granite Timber Co. *	Philipsburg	Granite
Sluice Gulch Leaking Mine Adit ³	Philipsburg	Granite
Microbial Biotechnology, Inc. ²	Polson	Lake
A & S Industries ²	Poplar	Roosevelt
Moe Chevrolet ²	Poplar	Roosevelt
Old Poplar Landfill ²	Poplar	Roosevelt
Poplar Post Office Site ²	Poplar	Roosevelt
Tule Creek Gas Plant/Crystal Oil ²	Poplar	Roosevelt
Tucson Hebrew Academy (Cut Bank AFB) ²	Port of Del Bonita	Glacier
Stauffer Chemical Company *	Ramsey	Silver Bow
Midway Store Dump ²	Ravalli	Lake
Richey Airport	Richey	Dawson
Rocky Boy Post & Pole ²	Rocky Boy	Hill
Lake County Weed District	Ronan	Lake
Old Community Dump ²	Ronan	Lake
Roundup Landfill ³	Roundup	Musselshell
Milwaukee Road Right-Of-Way Spill, St. Regis	Saint Regis	Mineral
Saint Regis Battery Site	Saint Regis	Mineral
Burlington Northern Fueling Facility, Shelby	Shelby	Toole
Petroleum Refining Company	Shelby	Toole
Treasure State Refining Co.	Shelby	Toole
Western Area Power Administration Substation ³	Shelby	Toole
Rau Disposal Pit	Sidney	Richland
Sannes Farm	Silesia	Carbon
Burlington Northern Somers Plant	Somers	Flathead
Somers Marina	Somers	Flathead
Bass Creek Post and Pole	Stevensville	Ravalli
Texaco - Sunburst Works Refinery	Sunburst	Toole
Marble Creek Post Yard	Superior	Mineral
Muster's Post Yard	Thompson Falls	Sanders
Thompson Falls Reservoir	Thompson Falls	Sanders
U. S. Antimony Corp.	Thompson Falls	Sanders
Kenison Pole Plant	Townsend	Broadwater
Townsend Post & Pole	Townsend	Broadwater
Ideal Basic Industry Plant Site Area	Trident	Gallatin
Asarco, Inc. Troy Unit	Troy	Lincoln
Charles M. Russell Refuge ³	Turkey Joe Landing	Fergus

*RCRA Permitted Facilities

²Reservation Facilities³Federal Facilities

CECRA (Non-NPL) PRIORITY SITES

SITE	CITY	COUNTY
Fisher Flats Dump ²	Valier	Pondera
Lewis Construction/Vaughn Gravel Pit	Vaughn	Cascade
Bitterroot Valley Sanitary Landfill	Victor	Ravalli
Railroad Tie Treating Yard	White Sulphur Springs	Meagher
Burlington Northern Derailment Site, Whitefish	Whitefish	Flathead
Burlington Northern Fueling Facility, Whitefish	Whitefish	Flathead
Wickes Smelter	Wickes	Jefferson
Davis Post Yard	Willow Creek	Gallatin
Wilsall PCB	Wilsall	Park
Weowna Oil Refinery	Winnett	Petroleum
Hirschy Corrals	Wisdom	Beaverhead
Beaverhead National Forest - Elkhorn Mine & Mill ³	Wise River	Beaverhead
Wolf Point Refinery (Kenco Refinery) ²	Wolf Point	Roosevelt
Haywire Mill	Yaak	Lincoln
Golden Messenger Mine	York	Lewis and Clark
Zortman/Landusky Mines	Zortman	Phillips

*RCRA Permitted Facilities

²Reservation Facilities

³Federal Facilities

~ WHERE TO FIND SUPERFUND DOCUMENTS IN YOUR COMMUNITY ~

DEQ encourages the public to read Superfund documents and become active in the process. Listed below are the locations of Superfund document repositories for public use. For more information about the location of documents, please call the DEQ Superfund hotline in Helena at 1-800-246-8198.

REPOSITORIES HOUSING MANY OR ALL SUPERFUND DOCUMENTS GENERATED BY DEQ:

Bozeman:

Montana State University Renne Library, MSU campus

Missoula:

University of Montana Mansfield Library, UM campus

Helena:

DEQ Superfund office, 2209 Phoenix Ave.

Montana State Library, Capitol Complex

Montana Historical Society Archives, Capitol Complex

REPOSITORIES WHICH HOUSE DOCUMENTS FOR SITES IN THEIR GEOGRAPHICAL AREA:

Anaconda:

Hearst Free Library

Lincoln:

Lincoln Community Library

Billings:

Parnley Billings Library

Eastern Montana College Library

Livingston:

Livingston-Park County Library

Bozeman:

Bozeman Public Library

Missoula:

Missoula Public Library

Clark Fork /Pend Oreille Coalition office

Missoula City-County Health Department

Butte:

Montana Tech Library

Butte-Silver Bow Public Library

EPA office, basement of Silver Bow Courthouse

CTEC office

Shelby:

Toole County Library

Sunburst:

North Toole County Library

Deer Lodge:

Grant-Kohrs Ranch National Park Service Main Office

Deer Lodge Public Library

Victor:

Farmers State Bank

Hamilton:

Bitterroot Public Library

Site sampling

A DEQ scientist samples abandoned, leaking drums at the Great Falls City Landfill on Wiremill Road. Using Department of Defense funds, DEQ cleaned up 600 drums of petroleum waste and adjacent contaminated soils. The site has been restored to essentially its natural condition.

**ARE YOU ON OUR MAILING LIST?**

Anyone interested in receiving periodic progress reports about Superfund or major CECRA sites in Montana can be on the DEQ mailing list. Please fill out the following form and mail it to: Superfund Program, Montana Department of Environmental Quality, P.O. Box 200901, Helena, MT 59620-0901.

PLEASE PRINT

NAME _____

ADDRESS _____

CITY, STATE _____ ZIP _____

Anaconda _____ Libby Groundwater _____ Comet Oil _____

BN/Somers _____ Silver Bow Creek/Butte Area _____ Other CECRA sites
(please specify)

East Helena _____ Bitterroot Valley Sanitary Landfill _____

Idaho Pole _____ BN/Livingston and Mission Wye _____

Milltown _____ Bozeman Solvent _____

Montana Pole _____ Missoula White Pine Sash _____

Mouat _____ Upper Blackfoot Mining Complex _____

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